The
SHIPPING WORLD
AND SHIPBUILDING & MARINE ENGINEERING NEWS

VOL. CXXV No. 3042 WEDNESDAY, OCTOBER 17, 1951 Price 1/6

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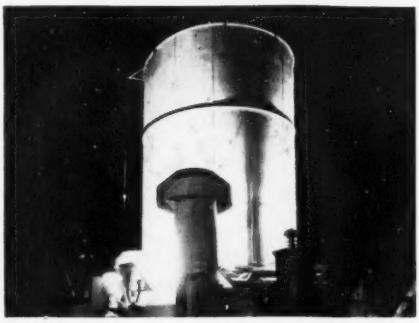

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The SHIPPING WORLD

AND SHIPBUILDING & MARINE ENGINEERING NEWS

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"The Price of Peace . . ."

Mr. H. T. N. Gaitskell, Chancellor of the Exchequer, introducing his 1951 Budget

BUDGET COMPARISONS

Revenue from Broadcasting, Entertainment, Betting and Pools of Three Peace Budgets

	1914	1939	1951 (Estimated)
RADIO LICENCES	Nil	£3,431,000	£12,500,000
TELEVISION LICENCES	Nil	Nil	£500,000
ENTERTAINMENT TAX	Nil	£8,153,000	£55,000,000
BETTING & POOLS TAX	Nil	Nil	£25,168,000

NOTE:—Betting and Pools Tax introduced in Emergency Budget, November 12th, 1947. Came into operation on January 4th. 1948. Applicable to bets on greyhound racing and football pools. Tax imposed, 10%. Estimated yield £15,000,000. Increased to 20% in 1949. Yield £23,000,000. Tax increased to 30% in 1950 Budget.

THE SHIPPING WORLD

A FORGOTTEN ELECTION ISSUE

NO VISITOR to this country would imagine from the speeches which have been made and the posters which have been seen in the constituencies during the General Election, that the seas flow round our shores and that our first, and absolutely vital, interest is to preserve our communications with the Dominions and Colonies, as well as foreign countries—in war and in peace. That means that we must, if we would live as free men in decent comfort, maintain our shipping and provide for its defence against any enemy and maintain also in the highest efficiency not only the shipyards and engine shops, but all the ancillary maritime industries. It is timely and significant that at this juncture Sir Murray Stephen and his fellow directors of Alexander Stephen & Sons, Ltd., should in their annual report refer to the matter of the replacing of old plant by new so that they may turn out merchant ships efficiently and cheaply. We have heard a great deal of the problem of replacement as it affects the fleets under the Red Ensign and owners have made out a strong case for special treatment in regard to taxation. But little has been said of the problem as it concerns the managements of the industries which build and equip the ships. But now the directors of this company have broken the silence. They state that they "envisage very considerable expenditure during the next few years on new plant and buildings."

Every firm is similarly concerned. Such replacement involves a large expenditure, far exceeding any normal depreciation provision made in prewar years. On the other hand, the report of this Scottish firm shows that of the money which might have been devoted to this purpose no less than £587,389 has been paid to the tax collector in the past two years instead of being spent, mainly, in wages. Burdensome and, indeed, unjust taxation is sapping the lifeblood from all these industries. If the present policy is continued, we shall not only be unable to compete successfully for freights on the trade routes with competitors, some of them profiting from various forms of flag discrimination, but orders from overseas for ships, liners, tankers and tramps, will decline; as British contracts become more scarce, prices will inevitably rise and owners overseas will go to other countries with their orders. Success in prewar days depended largely on the human element, brain and muscle, but now mechanisation has revolutionised the construction of all types of ships. The taxation policy which was evolved while the foundations of the Welfare State were being laid, is, in fact, killing the goose which lays the golden eggs on which each successive Chancellor of the Exchequer must rely in future in making his annual omelette which is known as "the Budget." The money which should be spent on new and better ships and on new and better buildings and new and better plant, all representing wages, is being squandered as it is being paid into the Treasury month by month.

The set-up of the maritime industries resembles that of an inverted pyramid, since the shipping industry supports many other industries. It is probable that shipping and its dependent industries will contribute at least £150,000,000 on the right side of the national trading account this financial year. But that is only part of the story. The success of our shipowners in maintaining our sea prestige encourages investors in overseas undertakings, insurance concerns, bankers, discount and accepting houses, stockbrokers and others who are engaged in business with the Dominions and foreign countries. Mr. Norman Crump, the economist, has stated that in 1950 our financial earnings paid for 45 per cent of the cost of our food imports, and during the first six months of 1951 they paid for 38 per cent. "As an exporter 'the City' was worth more to us than any single industry." What may be described as the City's tribute to the Treasury in the first six months of this year came to £230,000,000; the sum for the twelve months will probably exceed £500,000,000. If we add to that impressive figure the invisible exports of shipping, we arrive at a sum of not less, and possibly more, than £650,000,000.

Is not that a subject which is worth mentioning to the wage earners in the great industrial districts, who are permitted to imagine that they, as the makers of exported goods, are the only wealth-getters? Why should they not be reminded that exports invisible go a long way towards paying for the food and raw materials which enable us to maintain our present standard of living?

Current Events

The Spread of Nationalism

IT WAS a well established principle in this country that "the King can do no wrong" and the Post Office, with "Royal Mail" painted on its vans, could not be sued without permission of the Attorney General. This principle was replaced by the present Government. They declared that Parliament can do no wrong, and held to that declaration even when a majority of two million of the electors declared last year against nationalisation. Ministers used its small lead in the House of Commons to pass a measure to confiscate, paying compensation, a large part of the iron and steel industry. Was it surprising that, once it was claimed that the Parliament of Britain could do no wrong, other countries, such as first Persia and then Egypt, should make a similar assertion that their Parliaments could do no wrong? They argued in their council chambers that private individuals in the United

Kingdom, risking their dearly-bought savings, the result of self-denial, had been dispossessed of their businesses. They had built up successful basic industries—finance, represented by the Bank of England, coal, of which at one time we sent overseas 109,000,000 tons a year, inland transport, including the railways, a good many ships and several important ports, and power and light. They were efficient and prosperous, but they were taken over by Act of Parliament. The adventurers did not want their different enterprises taken over, but they accepted the decision of Parliament and submitted, receiving promissory notes from the Government, with a low rate of interest, as compensation. They did not ask the Government of the United States to intervene, though our coal was essential to many of the countries of the Atlantic Pact. Is it remarkable that overseas countries in which British enterprise has created great industries, giving well-paid employment to the nationals, should have come to the conclusion that they could safely follow the example set by British Ministers, pleading that whatever they did was a national and not an international matter and that neither the International Court of Justice nor the United Nations had any right to put its finger, or rather fingers, into the national pie? Of course, the whole reasoning of the rights of Parliaments since the present Government came into power is unsound, legally and morally. The implication in this and in other countries had been that property, such as business created by private persons, would be protected from confiscation, even with compensation, so long as the managements benefited and did not injure the community. We are witnessing the spread of a deadly disease. It has affected Argentina, Persia and now Egypt and no one can forecast where it will appear next, though most of us can guess.

The Safety of the Suez Canal

Shipowners under practically all flags are seriously concerned at the action of the Egyptian Government. The anti-British policy having been proclaimed at Cairo, all that the British Government could do was to announce that it took "the strongest exception" to the action of the Egyptian Government in introducing legislation seeking to abrogate the Anglo-Egyptian Treaty of Alliance of 1936 and the 1899 Anglo-Egyptian Condominium Agreement relating to the Sudan. It was added that the Egyptian Government was aware that "new and far-reaching proposals were about to be presented to them which would have a direct bearing on the improvement of Anglo-Egyptian relations and on the security of the Middle East." As to the future of the Sudan, from which Lancashire gets so much of her cotton, the Foreign Secretary has made a protest against the declaration that the Egyptians intend to rule the Sudan in future, proclaiming King Farouk its sovereign and, what one British Minister has described as the "corrupt feudalistic Egyptian Government," masters of the Sudanese people who have no love for any of their neighbours. The stark fact is that the nationalist disease, which had its origin in Britain, is spreading to the East as well as in the West. Perhaps some statistician will undertake the melancholy task of estimating how many thousands of our finest men and how many millions of our treasure were spent in establishing law and order and prosperity in India, Burma, Persia and Egypt. Now British administrations, which were honest and impartial, are being replaced by native administrations which are not so honest and impartial and in the result not only in this country, which has invested in great enterprises in these countries, but in other countries, heavy losses will be suffered. What Australians and New Zealanders, as well as the Indians, think of the British guardianship of the Suez Canal, on which the French and ourselves have spent so much money, being taken over by Egyptian troops, is in no doubt. The threat to their free communication with the West will overshadow them until some satisfactory settlement is reached with the Egyptians. We cannot afford to wreck the efficient working of the Suez Canal, which has existed since its opening.

Why Not?

An experienced politician once said that a great deal of expense and waste of nervous energy would be saved if it were announced one evening that an election would be held the next day, adding that he did not think the result would be any different from that of a long campaign. It is an attractive thought. There are others. For example, the suggestion that the key industries of a country should, by mutual consent of all parties, be kept out of the political arena, leaving the battle to be fought on foreign affairs and the varying views as to what constitutes, or does not, social security. Unfortunately this is difficult to visualise in the present election, with one side unhappily committed in theory, at least in the long term, of bringing all the big industries under State ownership and control. The pitfall into which the British trade unions have fallen, as has also the Cooperative movement, is today obvious. It was not so evident fifty years ago, when an attempt was made to form a party, a real Labour Party, which would further the interests of Labour. The baby grew up to be Socialism instead, dominated not by wage earners but by so-called intellectuals, like the Prime Minister, the Chancellor of the Exchequer, Mr. Dalton and others. The first lesson of the present contest is clear. Support for any party in the form of affiliation by either side of industry is dangerous because the objectives of the party may well change, as has been the case with the Labour Party. It is all for the workers at election time, but reverts to Socialist doctrine in the intervening periods. Though the unions are aware, by bitter experience, that State ownership, the chief aim of Socialism, achieves nothing but a change for the worse in control, it is difficult to retreat from a party allegiance developed over many years. The more credit is due, therefore, to the leaders of industry generally, and shipping and shipbuilding in particular, for realising long ago that party allegiances were inadvisable and contrary to the interests of the industries for which they have a real sense of national responsibility. Time has proved this attitude to be correct.

The Blessings of Neutrality

Neutrality confers another boon. It enables industry to speak for the nation. The question of which form of government which should be returned is, under the British system, one for the electors. Industry generally, including the maritime industries, must be willing, and has shown that it is willing, to work loyally with any form of government which has the support of the majority of the voters. In return, however, whichever party gains control, it must give industry the right to speak its mind upon matters on which it has expert knowledge. For example, the maritime industries will shortly have an opportunity of telling either a Conservative or Socialist Government the conditions on which their prosperity depends and their views are strengthened by not being partisan, since all they want is a reasonable degree of freedom. The new Government must join in every international effort to keep world trade at a high level. In its foreign and trade policy, it must insist that to Britain the shipping and shipbuilding industries are not just matters of prestige but of economic survival, as well as being our key defence. To compete in international markets, the new Government must guarantee that every effort will be made to lower the costs of production of all the items of manufacture which go into a ship, a matter which has become even more important with the rebirth of German and Japanese shipbuilding. The new Government must also, for our salvation, promise to review the incidence of industrial taxation so that fleets may be maintained at a high level of efficiency. A strong case has been made for special treatment of the maritime industries. In any case, the iniquitous balancing

charge must go. There are many other injustices and individual shipbuilders and owners have drawn attention to them during the past year or two. Without a free status, these views might be suspected by one side or the other in party politics, but, in the existing circumstances, the voice of the maritime industries, unallied to any party, should be listened to by those who will rule. Blessed indeed are the benefits of neutrality, as the trade unions would now somewhat ruefully agree if their most responsible leaders dared to speak their minds.

Brittleness in Steel

THERE CAN be few people better qualified to speak on the subject of steel than Sir Andrew McCance, and there can have been no surprise at his choice of this subject for his presidential address to the Institution of Engineers & Shipbuilders in Scotland. As he pointed out in his opening remarks, it is a material which still forms the basis of all engineering and shipbuilding construction, in which the members of the Institution are largely engaged. Sir Andrew devoted his address to a review of the extent of our knowledge of brittleness in steel. The tremendous increase in the use of welding in recent years has added greatly to the importance of work on steel brittleness, although failures due to this cause can often be avoided by suitable design and good welding technique. The first cause of brittleness in steel to be established was a high phosphorus content. Sir Andrew related the story of Bessemer's attempts to popularise his process in this country. Although he was able to manufacture steel that was ductile and tough in the extreme at his Sheffield works, licensees were unable to do the same, even with his assistance, and it was some time before the trouble was traced to the phosphorus in the ores that they were using. Many advances in knowledge have been made since then, and these are discussed in the address. Much, however, still remains to be done before a complete understanding of this important subject can be claimed.

Shipbuilding Results

DESPITE the uncertainties created by the shortage of steel and by the latest demand of labour for increased wages, the shipbuilders and marine engineers continue to fare well. This, of course, is especially true of the tanker specialists, a group in which William Doxford & Sons, Ltd., is prominently placed. Profits rose in the year ended June 30 last from £601,000 to £729,000 and, though tax took considerably more at £305,000 (against £217,000), the net profit was left substantially higher at £267,000 (£234,000). The dividend of 17½ per cent—the "standard" rate under the White Paper proposals—costs no more than £55,000 net and thus had generous cover. Shareholders are also receiving a share bonus of one in twelve, which will absorb £50,000 from the past year's profits and will raise the issued ordinary capital from £600,000 to £650,000. In this connection, the directors point out that, if next year they decide to declare the maximum dividend permissible under the White Paper proposals, it will remain at £105,000 gross in total and will result in a lower percentage distribution on the increased capital. The financial position of the company is very strong. Reserves amount to £1,878,000 and current assets include £1,320,000 in cash (large instalments have been received on account of work in progress), £356,000 in tax certificates

Sound Finance

IN THE year ended June 30 last R. & W. Hawthorn, Leslie & Co., Ltd., also tanker specialists, with large orders from the Royal-Dutch Shell and other oil groups, earned profits of £568,000, against £601,000. Net profit, however, after a higher tax charge of £282,000, was left rather lower at £206,000 (£224,000). Even so, the 12 per cent dividend is 3½ times covered. Finances are in excellent order. Current assets include £1,591,000 in cash and £1,389,000 in quoted investments, while capital and revenue reserves amount to £2,023,000, compared with an issued ordinary capital of £896,000. Fixed assets have been heavily written down from cost of £1,550,000 to £798,500. At all points, finances are fully adequate to the tasks ahead. The fact that trading and other profits of Alexander Stephen & Sons, Ltd., fell in the year ended March 31 from £627,000 to £326,000 reflects the completion of an unusually large number of contracts. The intervention of the tax cushion—the tax charge is £192,000, against £395,000—leaves the net profit only £73,000 down at £124,000, with sixfold cover for the repeated distribution of 18 per cent. The year closed with a full order book and robust reserves and liquid resources. The former total £1,238,000, by contrast with an issued ordinary capital of £200,000, while the latter, benefiting from substantial payments on account, include £491,000 in cash, £119,000 in quoted securities, £371,000 in bills of exchange and short-term loans and £301,000 in tax certificates. The company should have no difficulty in financing capital commitments of £258,000.

A Dividend Reserve

THE many activities of Thos. W. Ward, Ltd., in engineering and construction include ship-dismantling, the merchanting of scrap, metals and machinery, cement making and so on. These activities brought the group trading and other profits of £2,017,000 (£1,636,000) in the year to end-June last, while the year's total income was £2,097,000, compared with £1,737,000. Exceptional receipts rose sharply from £86,000 to £540,000 owing to the surplus of £507,000 realised on the vesting of the subsidiaries' shares in the Iron and Steel Corporation, which sum is transferred to capital reserve. The balance of profits for the year was thus considerably higher at £2,637,000, against £1,822,000. The net surplus for the year was £952,000 (£519,000), after tax and other charges totalling £1,321,000 and special provisions amounting to £323,000. If, however, the special debits and credits be excluded from the reckoning, the past year produced a true net profit of £735,000 against £628,000. Had it not been for the Government's dividend control proposals, the directors would have recommended payment of a dividend of 20 per cent. As it is, they are restricted to a "standard" 15 per cent. They have, therefore, taken the reasonable course of placing an additional 5 per cent in a dividend reserve for distribution when the opportunity arises. The finances of the group are robust. Even if the future tax provision of £676,000 is taken out, reserves at the year-end amounted to £3,439,000, or more than three times the issued ordinary capital of £1,100,000. The liquid resources also are of ample dimension, the cash holding alone totalling £1,106,000.

LOST COAL EXPORT MARKETS

"At unbelievable cost, this country has lost its hold upon its export markets through its inability to produce the fuel to meet the demand. Collieries are fully employed and overtime is being worked, yet it is found necessary to import 'dollar' coal to ensure industrial security."—*Sir Herbert Merrett*, chairman of Powell Duffryn, Ltd.

THE INTERESTS OF CAPITAL AND LABOUR

"A real community of interest will alone enable British shipping to reach its full competitive height. It is only by being fully competitive that the industry can offer the greatest common measure of employment for capital and labour, and the greatest common measure of return for capita and labour."—*Mr. D. F. Anderson*, chairman of the Shipping Federation.

COMRADESHIP AT SEA

"The affairs of the Royal Navy and Merchant Navy have become considerably mixed up, and that to the advantage of both. If by misfortune we should have to fight another war that comradeship will lie at the foundation of our country's survival, for unless under the Navy's protection merchant ships could bring in the food and raw materials we needed, the war would be lost at sea whatever happened elsewhere."—*Viscount Runciman*, vice-president of the Chamber of Shipping.

ON THE "BALTIC"

FUTURE OF THE HANDY-SIZED DEEP-SEA TRADER

By BALTRADER

DURING the war years, the immense effort which the United States and Great Britain devoted to building tramp ships was mainly concentrated on vessels of about 10,000 tons deadweight. A comparatively very small number of ships of about 2,700 tons deadweight, the Baltic class, were built in the United States. These vessels, affectionately known as Jeeps, have good main engines but not so good auxiliaries; their watertube boilers have, in many cases, given a large amount of trouble especially as those which have not been converted burn coal; to raise steam they need the best quality, and this is not obtainable to order in these days. "Take what is given you and ask no questions" should be printed on the N.C.B. notepaper. Many Jeeps have now been converted to oil, a fuel which can be relied on. Great Britain built a number of vessels of 4,600 tons deadweight, some with engines aft, the Malta type. Most of these vessels were produced mainly for stationary service in damaged ports to assist in the discharge of heavy war equipment. They had an 80-tons derrick and outsize winches and were loaded with 2,000 tons of permanent solid ballast for stability when handling big lifts. A mast was fitted which looked almost like a small factory chimney and was stepped on the tank top and so was an impediment in the after hold.

The German War-built Vessel

Since the war the "crane ships" have done good service for those owners who bought them from the Government. The heavy mast and derrick as well as the large winches and, of course, the solid ballast, were removed and a useful general trader was the result, although consumption of fuel is rather high. Simultaneously with the construction of the Jeeps and crane ships by the Allies, there were a number of 3,100 tons d.w. vessels with shelter deck built in Germany, Denmark and elsewhere under German control. They have beautiful lines and are excellently designed, especially for general cargo trade in the Baltic, but are not very well finished. Those built in the occupied territories may well have been scamped by unwilling workmen. Since the war British yards have been occupied with the building of large vessels to the exclusion of the handy deep-sea tramp. The Scandinavians have not built many handy ships of plain type for the coal, ore and timber trades; they have preferred more expensive and specialised types. Owners who bought the crane ships and the other handy deep-sea war products took the view that they would benefit by reason of the small output of handy ships during a number of years. They were somewhat disappointed in this, because while freights were high the large vessels were proving even more profitable than the smaller ones. When freights declined in 1950 the big ships still had the advantage and were able to secure a small profit more easily than the handy types. The explanation generally accepted, was that bulk trading by Governments tended to employment of large units of carrying capacity, although, in some trades, this involves unnecessary congestion of large ports and transhipment costs.

Improving Position

This year there appears to be a definite improvement in the position of the small deep-sea traders in relation to their large sisters. All, great and small, are in demand, but the advantage of the handy vessel in its right place seems to be more recognised. This tendency is no doubt occasioned by the handing over of Baltic sawnwood purchase by the Government to the timber trade. Many or most of the merchants prefer to ship comparatively small cargoes to fit their requirements at small ports or at berths in large ports where large vessels are unsuitable. Rail charges (and use of precious waggons) and the cost and service of lighters are minimised to the advantage of the merchants themselves and of the overburdened inland transport. It certainly appears that a change of policy has been adopted by the Fertilizer Manufacturers' Association, which now looks assiduously for handy tonnage to bring phosphate home from the Mediterranean. There is, of course, a lack of outward coal cargoes, which small vessels miss even more than large ones; at the same time the vessel of 3,000 or 4,000 tons deadweight is increasingly taking the place of the bigger ship in supplying Gibraltar and other bunker stations. The European coal trade, such as it is, offers little scope for the 10,000-tonner. The phenomenal rise in the value of secondhand tonnage since the summer of last year was slow in making itself felt in the case of the handy deep-sea tramp, but this class of vessel is now valued at a high price, which indicates the view of owners that there is a good future for the type. There is no doubt that the national economy will benefit if owners are encouraged by results to operate a sizeable fleet of vessels suitable for comparatively small consignments and the use of ports and berths of limited size.

The Freight Market

North America, both Eastern and Western, continues to occupy a large proportion of the world's tramp tonnage. Demand is heavy for shipping to bring American coal to Europe. Recent fixtures include *Argosax*, 9,200 tons, Hampton Roads to Rotterdam, at 82s. 6d., free of turn, October/November, and *Argobec*, 9,200 tons, at 82s., for the same ride prompt. The *Silverbriar*, 42,000 quarters, is fixed for grain from U.S./Gulf to U.K. at 26s. 3d. per quarter, November 15/December 10, which is 1s. 3d. more than previous fixtures. The *Cospanties*, 3,200 tons, has been chartered for heavy grain from U.S./Northern Range to Gothenburg/Stockholm range at 125s. for half the cargo and $16 for the other half, with November loading. For heavy grain from the North Pacific to the U.K., 147s. has been paid, December/January. The *Bucyrus Victory* is fixed with rice from Genoa or Savona to Japan at $20, f.i.o., October/November. The *Barpon Grange*, 7,600 tons, takes sugar in bags from Mauritius to the U.K. at 100s., November/December, and *Skiensfjord*, 7,000 tons, is similarly fixed for December. Iron ore from Bona to U.K., 5,100-5,400 tons, is fixed at 61s., November. The River Plate market remains under a cloud. The *Luxembourg*, 6-7,000 tons, is fixed at 60s., up river, completing Nicochea or Bahia Blanca to Antwerp/Hamburg range, 60 ft., November 1/16. Time charter has been fairly active and there is good inquiry for tonnage for the trip out to Australia and New Zealand. *Craigddu*, 8,800 tons d.w., 443,000 cu. ft. bale, 10½ knots on 18 tons of oil, is fixed from Antwerp to Australia at 61s. 6d. per month, November 10/30.

Reorganisation of Turkish State Shipping Lines

The Bill authorising the transformation of the Turkish State Shipping Lines into a public company—to be known as the "Denizcilik Bankasi"—with a capital of £T500 million, of which 51 per cent is to be held by the State and the balance by private investors and banks, was finally passed by the Grand National Assembly in August. It is understood that the necessary arrangements for the transfer of the present organisation to the new company will be completed by about the end of the year.

THE TURNROUND OF SHIPS

AN INTERNATIONAL PROBLEM

By PETER DUFF

UNDOUBTEDLY one of the most difficult of the long-term problems which face the world of shipping today is the problem of the delays in the turnround of ships in port. It is an international problem in every sense. Not only are costly delays experienced in many ports of the world, with the result that consumers of seaborne products everywhere have to pay higher prices, but ships of all flags are subjected to these delays in whatever country they occur. Individual port employers, port authorities and port labour organisations, can do, and in many cases are doing, much to overcome problems in particular ports. In Great Britain, for example, it is possible for the Ministry of Transport and other departments to examine various aspects of the problem and make recommendations for its solution; but solutions which are arrived at on a local, or even a national, basis cannot possibly have the best effect on an international problem of such magnitude unless coordinated on an international basis. Whatever can be done in one port to speed up the loading of a cargo may, it must be remembered, have the paradoxical effect of ensuring a slower discharge of the same cargo in a different port. Apart from that, to deal with the problem of port turnround in its entirety means taking into consideration matters far outside the normal sphere of influence of any port authority.

A Matter for Detailed Study

It is for these reasons that the International Cargo Handling Coordination Committee has been formed. This is a private concern, in which British, French, Netherlands and Norwegian enterprises have already shown keen interest. The provisional articles of association show that its object is to study, by the interchange and correlation of information, means whereby the speed of a ship's turnround in port can be brought more in line with the advance in sea speed, at great capital outlay, that has been attained by shipbuilders, marine engineers and naval architects in recent years. Information will be exchanged and experience pooled through the reading and discussion of papers, and the exchange of visits so as to study various port problems. In time, it is hoped that the Committee will be able to analyse any particular problem and make recommendations for its solution. There is no doubt that if this Committee attracts the support it deserves, in time it will be in a position to act as a strong influence for the amelioration of cargo handling conditions in port.

It is notable that the framework of the new association is designed from the first to approach the problem from a technical point of view, and to take into full consideration the many diverse factors which may lead, after examination, to a general improvement in turnround. For example, it is proposed to set up eight sections of the Committee, to specialise in various aspects of the problem. One section will deal with ship construction, that is the arrangement of holds and hatches, ships' cargo-handling gear, and all equipment in the ship which may be designed to speed up dispatch. For this section, it is hoped to draw membership from shipowners and builders, manufacturers of cargo-handling gear, naval architects, ship surveyors and the like. Another section will deal with equipment on shore, which will involve the interest of manufacturers of cranes and fork-lift trucks, shippers and packers, and importers and exporters generally. Not least of the factors which affect turnround is the cooperation of labour, and stevedores, dockers, ships' officers, and trade unions are invited to cooperate in this field. Other sections are designed to secure the cooperation of port authorities and other official bodies with interests in the dispatch of ships in port; and another will study the subject of ancillary transport systems, railways, roads, canals and air transport. It is also proposed to set up "laboratories" in which model tests can be carried out on ideas for improving cargo-handling gear. Special study will be made of the possibilities of speeding up cargo handling in tropical conditions and primitive harbours; while a final section will deal with war transportation, the lack of coordination in which presented serious difficulties during the Second World War.

A Need for the Best Brains

It is apparent that in this framework exists the opportunity of bringing the best expert brains of all nationalities to bear on this serious international problem. So far it has been suggested that membership should include shipbuilders and owners, manufacturers of cargo-handling equipment on ship and shore, shippers and packers of manufactured goods and importers of bulk cargoes, dockers and stevedores, port authorities and other officials, and all those who are associated, directly and indirectly, with the turnround of shipping in port; not least of these should be representatives of the underwriters of ships and cargoes. It will take time, and a good deal of hard work and good will, for this organisation to get into full swing; but it is designed to deal with a long-term problem, and the suggested international and technical approach has much to commend it.

INTERNATIONAL CARGO HANDLING COORDINATION COMMITTEE

Provisional Articles of Association

PROVISIONAL articles of association have been drawn up for the proposed International Cargo Handling Coordination Committee, which is being formed with the object of studying, by the interchange and correlation of information and experience, means whereby the turnround of ships in port can be brought more in line with the improved speed of merchant ships at sea. Several preliminary meetings of those interested in such an organisation, in Britain, France, Norway and the Netherlands, have already taken place, and a meeting will be held on October 30, on board the H.Q. ship *Wellington*, Thames Embankment, London, W.C.2, to discuss the proposed articles of association.

The articles provide for the setting up of eight sections dealing with various aspects of the problem of port turnround. The proposed sections are as follows:—

1. *Shipbuilding.* Construction and arrangement of hatches, holds, arrangement of ship cargo-handling gear, side doors, derricks, cranes, winches, and all technical improvements on or within the ship designed to speed up dispatch.

2. *Shore Cargo Handling.* Methods and materials of packing and handling in big works, factories or stores ashore, destined to make discharge and loading easy and, as far as possible, internationally standardised.

3. *Labour.* Problems concerning manpower insofar as it concerns loading and discharge; dissemination of information about training, welfare, medical centres, canteens, safety measures, pilferage and insurance.

4. *Port Authorities.* Official bodies, such as Ministries, Customs, public works, light and buoyage departments, port authorities and Chambers of Commerce.

5. *Non-Sea Transport.* Railways, roads, canals, air transport—as complementary transport systems.

6. *Model Tests.* Development of "laboratories" for cargo handling, with tests on scale models.

7. *Colonial and Open Roadstead Cargo Handling.* Loading and discharging of ships lying offshore, in heavy tides, tropical conditions and in primitive harbours, etc.

8. *War Transportation.* Handling of war materials, including packing and loading of war equipment.

The provisional address of the Committee is at 110 Fenchurch Street, London, E.C.3.

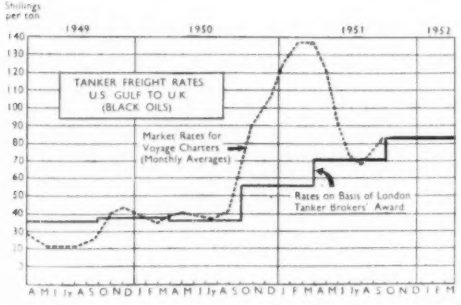
COAL AND OIL

COASTAL SHIPPING HELPS TRANSPORT SHORTAGE

Mention was made at the Council meeting of the Chamber of Shipping on Thursday of the part which coastal shipping is playing in alleviating domestic transport troubles, in particular through the coastwise carriage of coal. A recent statement by the British Transport Commission regarding the plans made for coping with the problem of transport this winter detailed the arrangements being made on the railways and roads, and it was felt that shipping's contribution might also receive some attention. The carriage of coal, particularly to London, is of course the largest single feature in coastwise trade. During the 12 months which ended in August 1951, the tonnage of cargo carried coastwise amounted to 34 million tons, of which 26½ million tons were coal. In contrasting this latter figure with the tonnages carried by road and rail, it should be remembered that sea carriage is mostly over long hauls ranging from 150 to 450 miles. A statement issued by the Chamber continues: "In the *Bulletin for Industry* for September, issued by the Information Division of the Treasury, it was stated that the railways were planning for a maximum diversion of coal not only to road transport, but to coastwise shipping. It is a little curious that in the Commission's general survey of the measures adopted to meet this winter's situation, there should be no mention of the relief which the fullest use of coastwise shipping will afford to industry."

New Oil Refinery at Antwerp

The first major refinery at Antwerp, with a throughput capacity of 1,400,000 metric tons a year, was opened recently. It is owned by S.I.B.P. (Société Industrielle Belge des Pétroles, S.A.), which is a joint fifty-fifty venture of Anglo-Iranian and Petrofina. A new marine dock has been constructed by the Antwerp Port Authorities to accommodate two 28,000-tons tankers simultaneously. Barge berths have been provided for handling the export of finished products by canal. Most of the finished products from both the new refineries will be marketed within the Benelux area, and will help to meet local bunker requirements. Site work on the refinery started in September 1949. Most of the material used in the construction was purchased in Belgium, the balance coming from the U.K. and the U.S.A. The main unit for crude oil distillation is a combination type including viscosity breaking and cracking. In addition, a thermal reformer has been erected to raise the octane number of the gasoline produced. The building of a second large-scale refinery, that of Esso-Standard, with a planned capacity of 1.3 million tons, has recently started and will be completed by 1953. Also, the output capacity of one of Belgium's older plants, belonging to the local company R.B.P. (Raffinerie Belge de Pétroles, S.A.), has recently been raised from 100,000 to about 350,000 tons. There are three other old-established units whose combined capacity, however, is only about 300,000 tons a year. The total refinery capacity at Antwerp is therefore now about two million tons, and will reach about 3.3 million tons after the completion of the Esso refinery. Belgium's only refinery outside Antwerp is a 100,000 tons Shell plant at Ghent providing mainly special products.



Tanker Brokers' Award

This chart, prepared by the Petroleum Press Bureau, shows the rates that would be payable on the basis of the latest award of the Panel of London Tankship Brokers compared with the free market rates. The voyage considered is for black oils from U.S. Gulf to U.K.

Shorter Items

The first cargo to be received at Barry Docks from the new Esso refinery at Fawley consisted of 12,000 tons of diesel fuel, which was unloaded from the tanker *Esso Appalachee*.

Figures issued by the River Wear Commissioners show that during the first eight months of this year, 2,011,577 tons of coal and coke were shipped from the river, an increase of 20,129 tons on last year.

A large increase in the capacity of the outlet system for crude oil from Alberta is planned by the Imperial Oil Co., Ltd. Five additional pumping stations on the pipeline to Lake Superior are to be completed this year, and two more large lake tankers are to be built. The flow of oil, which is at present at an annual rate of about 2,850,000 tons, will be increased to 5,000,000 tons a year by 1953.

The second issue of *Oil, Lifestream of Progress*, the journal of the Caltex group of companies, contains an article describing the reconstruction after the war of the French refinery at Bec d'Ambes, on the Gironde. This refinery is now owned by a subsidiary of the Caltex group, Raffineries de Petrole de la Gironde. In the process of reconstruction it was considerably enlarged, and present production plans call for an output of 600,000 tons of petroleum products a year. The plant can handle tankers of 15,000 tons deadweight.

OFFICIAL NOTICES

New Company

Livett Franks Ship's Stores, Ltd., 9 St. Helens Place, London, E.C.2.—Registered September 6. To carry on business of engineers' merchants, ships' stores merchants, etc. Nominal capital: £100 in £1 shares. Directors: C. R. Petrie, 43 Lowndes Square, London, S.W.1; J. Hingston, Maynards Croft, Thaxted, Essex; F. D. Frank and F. J. Risby.

Increase of Capital

Gregson & Co., Ltd., shiprepairers and fitters, etc., 7 Jewry Street, London, E.C.3.—Increased by £25,000, in £1 6 per cent cumulative preference shares, beyond the registered capital of £35,000.

Consulting Marine Engineers

The annual dinner of the Society of Consulting Marine Engineers and Ship Surveyors was held last Friday. The toast of the shipping industry was proposed by Mr. A. C. Hartley, until lately chief engineer of the Anglo-Iranian Oil Co., Ltd., and a reply was made by Sir James German, president of the Cardiff Chamber of Commerce. The toast of the Society was proposed by Sir Ronald Garrett, chairman of Lloyd's Register of Shipping, and to this the president of the Society, Mr. George M. Cousins, replied.

Sir Clement Jones, chairman of the Commonwealth Shipping Committee, has visited the port of Churchill, Manitoba, to investigate the possibility of extending the limited shipping season there.

INTERESTING FACTS ABOUT OIL

No. 7. *What are oil products?*

In addition to Motor and Aviation Spirit, Diesel, Furnace and Lubricating oils, an ever growing range of products with a multitude of uses flow from modern refineries.

Liquified gases (butane and propane) under various names such as Calorgas, Propogas, etc., are of the greatest use in country districts and where mobility is a factor such as on board yachts, in supplying domestic heating. Industrially they are used for cutting and welding metals.

"S.B.P." Spirits. White Spirit is the most important of the range of S.B.P. (Special Boiling Point) Spirits. It is extensively used as a thinner for linseed oil base paints and paints generally. It is employed in dry cleaning, as a solvent in wax polishes of all kinds for boots, furniture, linoleum, etc., and in metal polish. Large quantities are used as solvents in the cellulose paint industry.

In the rubber industry practically all dipped rubber goods are manufactured from solutions of rubber in S.B.P. spirits, while proofed fabrics are produced from rubber doughs containing S.B.P. spirits which are spread on the fabric and allowed to evaporate. Large quantities are used in the preparation of rubber solution.

Production of edible and vegetable oils is normally carried out by extraction of the oil from the seed by S.B.P. Spirits.

One very familiar form of S.B.P. spirit is lighter fuel.

Kerosine is extensively used for heating, cooking and lighting purposes and especially for hovers, incubators and railway signal lamps. Vaporising oil or power kerosine is principally used on farm tractors and coastal fishing fleets. In the latter case its greater safety factor from fire risk off-sets its lesser efficiency as a combustion spirit compared with motor spirit (gasoline).

Fungicides and Insecticides. The role of petroleum is to act as a carrier of toxic materials and constitutes up to 95% of the finished material. Household sprays are frequently a solution of pyrethrum and D.D.T., the carrier being a volatile spirit of the Kerosine type.

Horticultural Sprays require a more permanent film to cover the leaf and one which will not damage the foliage when applied. Anti-malarial oil for application to stagnant waters forms another application.

Medicinal and Technical White Oils. In medicine the most familiar grade is liquid paraffin, while in the cosmetic industry large quantities are used in the preparation of hair oils, creams, ointments, scents, embrocation, etc. They are further used as food preservatives and in the manufacture of polishes, soaps and inks.

(to be continued in Advertisement No. 8)

ANALYSIS OF BRITISH TONNAGE

UNITED KINGDOM MERCHANT SHIPS IN PRIVATE OWNERSHIP

THE accompanying tables provide a detailed statistical analysis of merchant ships in private ownership on the United Kingdom and Colonial register. The tables break down the structure of the Mercantile Marine into its constituent parts and further subdivide some of the groups into age and size categories. Full details of the definitions according to which these tables are compiled were given in THE SHIPPING WORLD of January 24, 1951. They do not include Canadian-owned ships which have been transferred to United Kingdom registry.

The merchant fleet covered by the statistics, as shown in Table I, showed a net decrease of 93,830 tons gross in the third quarter of this year, after making adjustments for tonnage alterations and the disposal of ships for breaking up or to foreign flags. The net loss since the beginning of the year has been 62,469 tons. Only the tanker fleet has increased during the last quarter, by about 67,700 tons gross, a gain which was more than offset by the decline in ocean-going dry-cargo tramp tonnage. The tramp total, at 2,942,794 tons gross, is the lowest recorded since these statistics were first compiled in 1948. Ocean-going liner tonnage decreased by some 57,000 tons. The coastal and short-sea section shows little change, except for a drop in tonnage on the Colonial register, due to the accumulation of arrears in the reporting of disposals.

The disposal of older liner tonnage outpaced the delivery of new vessels from the yards during the last quarter, when 50,000 tons of new ships were added and 90,371 tons of ships built in 1931 or earlier were removed. One liner of 10/14,999 tons was added and one of 22,600 tons was scrapped. The 6/9,999 tons group lost 31,319 tons and the 3/5,999 tons group lost 17,142 tons. There was an increase of 20,200 tons in tramp tonnage of 6/6,999 tons, and a decline of 22,200 tons in tramps of 7,000 tons gross and over. The 4,000 and 5,000 tons groups each declined by more than 30,000 tons. Tramps built in 1931 and earlier lost 35,300 tons gross, and there were also disposals of

TABLE I
BRITISH MERCHANT SHIPS IN PRIVATE OWNERSHIP*

Non-tankers :	1 *Jan.*, 1951 *Tons gross*	1 *July*, 1951 *Tons gross*	1 *Oct.*, 1951 *Tons gross*
Ocean-going liners	8,034,652	8,101,916	8,044,890
Ocean-going tramps	3,161,635	3,012,629	2,942,794
Short-sea and coastal	1,587,093	1,598,750	1,564,083
	12,783,380	12,713,295	12,551,767
Tankers	3,651,739	3,753,185	3,820,883
Total	16,435,119	16,466,480	16,372,650

* Vessels of 500 tons gross and over in private ownership and on the United Kingdom or Colonial register, according to records available and information received by *THE SHIPPING WORLD* up to the dates specified. Tonnage managed by shipowners on behalf of the Ministry of Transport, or managed on behalf of Canadian owners (but registered in the U.K.) is not included.

TABLE II
AGE OF OCEAN-GOING LINERS AND TRAMPS
Dry cargo and passenger vessels of 3,000 tons gross and over*

LINERS		*Year of Build*	TRAMPS	
1 Oct., 1951 *Tons gross*	1 *July*, 1951 *Tons gross*		1 *July*, 1951 *Tons gross*	1 Oct., 1951 *Tons gross*
1,867,353	1,957,724	1931 and earlier	599,711	564,388
28,392	28,392	1932	20,510	20,510
36,752	36,752	1933	13,177	13,177
59,727	59,727	1934	—	—
133,647	133,647	1935	28,017	17,926
253,852	253,852	1936	56,243	46,228
222,897	222,838	1937	44,306	39,507
201,253	201,253	1938	46,085	46,085
252,957	252,957	1939	60,644	60,644
222,536	222,536	1940	165,856	165,856
95,947	95,934	1941	258,809	258,809
359,019	359,703	1942	348,852	334,441
690,083	697,332	1943	430,284	430,644
612,167	618,764	1944	433,834	425,957
393,629	396,535	1945	197,729	205,480
435,374	432,095	1946	73,913	73,575
473,543	474,860	1947	51,033	51,033
545,382	546,641	1948	23,634	23,634
495,150	495,150	1949	64,783	64,783
467,267	467,267	1950	72,481	72,481
197,963	147,957	1951 to date	22,728	27,636
8,044,890	8,101,916		3,012,629	2,942,794

* Excluding cross-channel passenger ships of 3,000 tons gross and over, which are included in Tables III and V.

TABLE III
LINER TONNAGE BY SIZE
Dry cargo vessels of 500 tons gross and over

Size	1 *Jan.*, 1951 *Tons gross*	1 *April*, 1951 *Tons gross*	1 *July*, 1951 *Tons gross*	1 Oct., 1951 *Tons gross*
Ocean-going				
30,000 t.g. and over	234,770	234,770	234,770	234,770
20/29,999 t.g.	731,647	731,647	759,279	736,671
15/19,999 t.g.	352,408	336,901	354,752	355,003
10/14,999 t.g.	1,237,151	1,213,752	1,225,672	1,239,464
6/9,999 t.g.	4,355,854	4,399,314	4,460,895	4,429,576
3/5,999 t.g.	1,122,822	1,116,067	1,066,548	1,049,406
Total ocean-going	8,034,652	8,032,451	8,101,916	8,044,890
* Coastal, etc. :				
1,500/2,999 t.g.	267,218	262,146	256,594	257,177
500/1,499 t.g.	186,812	183,891	183,284	183,386
Cross-channel passenger ships	189,875	188,365	189,340	188,219
Total	8,678,557	8,666,853	8,731,134	8,673,672

*This table does not include colliers as shown separately in Table V, or tankers.

TABLE IV
TRAMP TONNAGE BY SIZE
Dry cargo vessels of 500 tons gross and over

Size	1 *Jan.*, 1951 *Tons gross*	1 *April*, 1951 *Tons gross*	1 *July*, 1951 *Tons gross*	1 Oct., 1951 *Tons gross*
Ocean-going :				
7,000 t.g. and over	1,501,854	1,479,780	1,421,451	1,399,237
6/6,999 t.g.	374,415	361,372	355,751	375,960
5/5,999 t.g.	732,084	701,081	717,416	685,813
4/4,999 t.g.	403,950	384,523	379,755	346,645
3/3,999 t.g.	149,332	148,591	138,256	135,139
Total ocean-going	3,161,635	3,075,347	3,012,629	2,942,794
Coastal, etc. :				
1,500/2,999 t.g.	205,967	213,389	215,216	215,216
500/1,499 t.g.	231,156	227,454	226,246	226,246
Total U.K.	3,598,758	3,516,190	3,454,091	3,454,091
On Colonial register	218,684	226,657	226,907	226,907
Total	3,817,442	3,742,847	3,680,998	3,680,998

TABLE V
COASTAL AND SHORT-SEA TRADERS
Ships of 500 to 2,999 tons gross*

	1 *Jan.*, 1951 *Tons gross*	1 *April*, 1951 *Tons gross*	1 *July*, 1951 *Tons gross*	1 Oct., 1951 *Tons gross*
Liners, short-sea	267,218	262,146	256,594	257,177
,, coastal	186,812	183,891	183,284	183,386
,, passenger*	189,875	188,365	189,340	188,219
	643,905	634,402	629,218	628,782
Tramps, short-sea	205,967	213,389	215,216	211,408
,, U.K. coastal	231,156	227,454	226,246	223,588
Colliers*	287,381	289,015	301,163	303,034
	1,368,409	1,364,260	1,371,843	1,366,812
On Colonial register (dry cargo)	218,684	226,657	226,907	197,271
	1,587,093	1,590,917	1,598,750	1,564,083
Tankers	106,548	107,057	106,700	107,658
Total	1,693,641	1,697,974	1,705,450	1,671,741

* Cross-channel passenger ships and coastal colliers of over 3,000 tons gross are included in this table.

TABLE VI
TANKER TONNAGE BY SIZE
Ships of 500 tons gross and over*

	1 *Jan.*, 1951 *Tons gross*	1 *April*, 1951 *Tons gross*	1 *July*, 1951 *Tons gross*	1 Oct., 1951 *Tons gross*
Ocean-going :				
12,000 t.g. and over	196,680	209,482	221,554	240,054
10/11,999 t.g.	868,125	869,031	934,604	966,647
8/9,999 t.g.	1,604,563	1,613,963	1,647,876	1,664,811
6/7,999 t.g.	609,212	602,256	581,731	594,026
3/5,999 t.g.	221,114	215,180	215,223	201,190
Total ocean-going	3,499,694	3,509,912	3,600,988	3,667,728
Coastal, etc. :				
500/2,999 t.g.	106,548	107,057	106,700	107,658
	3,606,242	3,616,969	3,707,688	3,775,386
Whaling factory ships	45,497	45,497	45,497	45,497
Total	3,651,739	3,662,466	3,753,185	3,820,883

* This table does not include tankers used as store ships, and excludes Admiralty tankers.

(*NOTE : Table VII will be found overleaf*)

TABLE VII

OCEAN-GOING TANKER TONNAGE IN AGE GROUPS

Ships of 3,000 tons gross and over*

Year of build	1 Jan., 1951 Tons gross	1 April, 1951 Tons gross	1 July, 1951 Tons gross	1 Oct., 1951 Tons gross
1931 and earlier	689,479	670,454	643,633	630,612
1932	18,617	18,617	18,780	18,780
1933	37,166	37,166	37,166	37,166
1934	4,085	4,085	4,085	4,085
1935	66,107	66,107	66,107	66,107
1936	103,724	103,724	103,754	103,754
1937	140,790	130,374	130,374	130,374
1938	111,025	111,025	111,025	111,025
1939	118,035	118,035	118,035	118,035
1940	16,461	16,461	16,461	16,461
1941	112,590	112,590	112,590	112,590
1942	177,049	177,049	177,058	177,058
1943	244,092	244,092	234,288	234,282
1944	432,935	422,223	422,231	422,231
1945	327,785	338,404	359,828	391,871
1946	209,348	209,348	209,348	209,348
1947	76,793	76,793	76,793	76,793
1948	129,890	129,890	129,890	129,890
1949	192,894	192,894	192,894	192,896
1950	290,829	303,838	303,838	303,838
1951 to date	—	26,743	132,810	47,722
Total	3,499,694	3,509,912	3,600,988	3,667,728

* This table excludes whaling factory ships, coastal tankers, tankers used as store ships, and Admiralty tankers.

tramps built in 1935-37 and 1942. Only one new tramp was delivered during the quarter.

Tankers in all size categories show an increase in tonnage during the quarter, except for the smallest. The 10/11,999 tons group increased by 32,000 tons, and the delivery of the *British Adventure* is represented in the largest size group by the provisional figure of 18,500 tons gross. The smaller tankers disposed of were built in 1931 or earlier, and the additions were all new vessels except for some tonnage built in 1945 but transferred to U.K. registry during the quarter.

Furness Shipbuilding Co., Ltd.

Mr. Stephen N. Furness, chairman of the Furness Shipbuilding Co., Ltd., of Haverton Hill, Middlesbrough, has decided to relinquish that position. Recently a controlling interest in the company was obtained by a London financial syndicate, but Mr. Furness and the chief officials all retained their positions. The yard has orders sufficient to keep fully busy for the next six or seven years and has a big tanker-building programme. Since the firm was started and the yard opened in 1918 by the first Viscount Furness, great-uncle of Mr. Furness, the family connection has remained unbroken. Mr. Furness succeeded his uncle as chairman about eight years ago. Mr. Furness, who lives at Otterington Hall, Northallerton, is a man of many interests. He is a bachelor and for 10 years was M.P. for Sunderland. He is County Commissioner for the North Riding Boy Scouts, a movement in which he has always retained the keenest interest.

BOOK REVIEWS

Marine Insurance Digest, by Hugh A. Mullins. (Cornell Maritime Press, Cambridge, Maryland, U.S.A. Price, $5.00.)

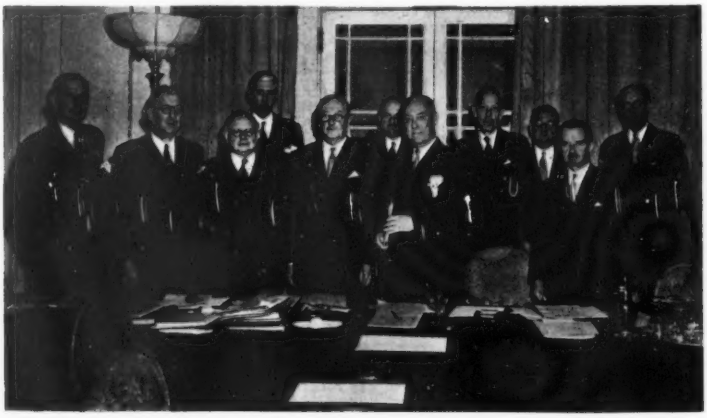
The author is chairman of the Association of Average Adjusters, of which he has been a member since 1914, and therefore an expert in his subject. This book, however, is not intended for the expert. It is written in language understandable to the layman, and its somewhat novel arrangement, each subject or technical term being dealt with in alphabetical order, makes it an admirable handbook for shipping company personnel, merchants, exporters and importers, and the younger people in the marine insurance world. Another excellent feature is the provision of a number of blank pages for notes at the end of the book.

Oil and Petroleum Year Book, 1951. (Walter E. Skinner, 20 Copthall Avenue, London, E.C.2. Price 20s.).

The 42nd edition of this standard reference work has now been published. Complete and up-to-date particulars are given concerning 762 companies operating in all parts of the world and covering all branches of the oil industry, together with a list of names and addresses of 492 managers and engineers. The particulars of each company include the names of directors and other officials, description of business, crude oil production, refinery runs, details of capital, dividends and financial results.

The Law of the Sea, by William McFee. (Faber & Faber, Ltd., 24 Russell Square, London, W.C.1. Price 18s.).

This is no legal textbook, though no student of maritime law would be the worse for reading it. In plain language, devoid of legal jargon, the author sets out to explain to the general reader the background, origins and development of international maritime law in all its aspects. It is a great undertaking, which the author has carried out with an infectious gusto that makes it difficult to stop reading. There is much that is well known, but much more that is little known; and all is presented in an interesting and readable fashion. Although the author is an American, his outlook is international, as is essential when dealing with maritime affairs, and some of his terse comments on American merchant marine policy underline this quality. It is refreshing, for example, to see an American write: "Leaving out those military considerations comprised in the phrase 'national defence', there is no commercial reason why the United States should have a large mercantile marine competing with what are called 'the carrying nations', Norway, Holland, Britain, etc. These are essentially maritime people and depend on services rendered to pay for foreign imports of goods. . . . Unfortunately, a country committed by tradition to a large measure of protective tariffs is constantly embroiled with regional politicians who, whether they admit it or not, unconsciously advocate autarky. Apart from the need of ships in time of war they want them to sail loaded and return empty."



Powell Duffryn Directors

The annual general meeting of Powell Duffryn, Ltd., on October 10 was the first at which Sir Herbert Merrett has presided as chairman. An extract of the statement made by Sir Herbert appears elsewhere in this issue. The picture of the members of the board of Powell Duffryn who were present at the meeting shows, from left to right: Mr. Edmund L. Hann, Mr. H. V. Vale, Mr. E. W. Ganderton, Mr. W. M. Codrington, Mr. Alfred Read, Mr. E. J. P. Stephenson Clarke, Sir Herbert Merrett (chairman), Mr. Robert W. Foot (deputy chairman), Mr. Griffith Llewellyn, Mr. T. S. Overy and Mr. Miles B. Reid

Powell Duffryn, Limited

Sir Herbert Merrett's Statement

THE annual accounts of Powell Duffryn, Ltd., to March 31, 1951, were presented at the annual general meeting held on October 10. The following is an extract of the statement by the chairman, Sir Herbert Merrett:—

When, after the vesting of our colliery assets, new ventures were embarked upon, it was known there would be a period when certain investments would yield no income. A policy of moderate dividend distribution and building up of the carry-forward of our profit and loss account was adopted. We are passing through this period now but, with the expectation of new and substantial income from 1953 onwards, the specially created carry-forward may remain intact. It is, however, available for payment of reasonable dividends if current earnings are insufficient.

Our exporting houses continue to trade in the movement of coal from one country to another. At unbelievable cost, this country has lost its hold on its export markets and British-owned coaling depots are largely dependent upon foreign coals to earn profits taxable in this country. It would be idle to pretend that this is a passing phase.

By virtue of their service to producer and consumer, based upon uninterrupted experience of more than a century, Stephenson Clarke, Limited (and their subsidiary and associated companies), have been able to maintain the volume of their trade at home. The Stephenson Clarke fleet of ships is fully employed, new tonnage is being added year by year, and the area of its trading is being widened.

Satisfactory profits are expected from the group's direct interest in the oil marketing industry through our 50 per cent partnership with Socony-Vacuum Oil Co., Inc., of New York, in the well-known British company, Vacuum Oil Co., Ltd. The construction of the refinery on the Coryton site has proceeded and amplifications have been made in the original layout, chiefly by the incorporation of a catalytic cracking unit. As partners in this undertaking, we have not neglected the opportunity to invest further capital in what may prove to be the last word in refinery construction.

The clearing up stage of compensation for the mines and ancillaries proceeds at snail's pace. If attempts to obtain voluntary agreement for the division of the area allocation are unsuccessful, settlement through the Valuation Board may be deferred for many years.

Greater Efficiency and Economy

In order to achieve greater efficiency and economy, it has been decided that two of the group's principal houses, namely, Cory Brothers & Co., Ltd., and Gueret, Llewellyn & Merrett, Ltd., should be merged. The combined companies will operate as "Cory Brothers & Co., Ltd.," a name well known all over the world, with a long and successful trading record.

When all our coal mines, coke oven plants, tar refineries and power stations were taken from us on January 1, 1947, we decided that the great knowledge and experience accumulated over the years should be mobilised and placed at the disposal of clients in this country and throughout the world. Powell Duffryn Technical Services, Ltd., was, therefore, formed as a consultant organisation to give impartial advice and service on all matters connected with the finding and mining of coal and its treatment, processing and efficient utilisation. These services have been welcomed by Governments and private clients throughout the world. During the past four years we have included among these clients the Governments of Pakistan, Ceylon, Southern Rhodesia, Nigeria, British North Borneo and Sarawak, Nyasaland, the State Government of Queensland and Victoria, and, in Europe, the Governments of Denmark, Greece, and Austria. In several of these cases we still have important work in hand. The report and accounts were adopted.

Chamber of Shipping

Shipping and Invisible Exports

AFTER the meeting of the Council of the Chamber of Shipping on Thursday it was announced that the shipping industry is to make a further inquiry, at the request of the Government, into the contribution of United Kingdom shipping to invisible exports for 1952. This is the second inquiry of the kind to be carried out by the shipping industry. The first, made by the General Council of British Shipping in respect of 1947, showed that in that year vessels owned in the United Kingdom, or operated by United Kingdom owners, earned a net sum of £69,000,000 in foreign currency. Since then various estimates have been made of the contribution of the British Mercantile Marine to invisible exports, and it is thought that the figure may now be in the neighbourhood of £150,000,000. The inquiry about to be undertaken will enable an accurate computation to be made.

The Council was advised that renewed representations to the Ministry of Transport for the complete removal of the restrictions on the sale of ships abroad have not been successful. It was urged that as a first step Liberty ships and other types of "stop-gap" vessel built during the war should be treated as being 15 years of age or more. Unfortunately the Ministry of Transport has been unable to agree to this, but the industry is continuing its efforts to get the restrictions removed. The industry has also expressed to the Ministry of Transport its disappointment that the restrictions on the offtake of bunkers in the United Kingdom, introduced in November 1950 as a temporary measure, have still not been removed. The Minister of Transport, in expressing regret that the present position will not permit the removal of the bunker restrictions, has given an assurance that they will be lifted as soon as coal supplies warrant it. The Council also considered the problem of the coastwise transport of coal during the coming winter, an important issue which is more fully dealt with on page 266.

The Council received a report from the Ports Committee, which has been giving consideration to the recently published report of the Docks & Inland Waterways Executive on the Review of Trade Harbours. The Committee also had before it the further harbour schemes which have just been prepared for Aberdeen and the River Tay. Owners directly interested in the trade of these ports are being consulted but it is unlikely that the schemes will be acceptable, since they are based on a large measure of centralised control through the British Transport Commission, including the right of the Commission to appoint all the members of the new harbour boards which the schemes envisage. The Aberdeen scheme follows the pattern of the Clyde scheme, in which these features also appear, to which strong objection was taken by the industry at the time.

The Annual Dinner

Viscount Runciman, vice-president of the Chamber, presided at the annual dinner at Grosvenor House, London, in place of the president, Mr. C. E. Wurtzburg, who was absent on medical advice. Viscount Runciman, welcoming Admiral Lord Fraser of North Cape, the First Sea Lord, stressed what Mr. Wurtzburg had done over a period of years to ensure that the Royal Navy and the Merchant Navy should work together more closely in peace no less than in war. Two wars had done much to strengthen the bonds between the two, and if we ever had to fight another war that comradeship would lie at the foundation of our country's survival, for unless under the Navy's protection our merchant ships could bring in the food and raw materials we needed, the war would be lost at sea, whatever happened elsewhere.

The toast of "The Shipping Industry" was proposed by Mr. Alfred Barnes, Minister of Transport, who paid a warm tribute to the magnificent work the industry was undertaking. Mr. D. F. Anderson, replying, said that one of the difficulties of the shipping industry was the achievement of close collaboration between the seagoing and shore staffs. He said, however, that the worst worry shipowners had at the moment was probably how to find the money to replace an obsolete ship costing £150,000 with a new one which would cost £450,000. Mr. R. D. Ropner, in proposing the toast of "The Guests," thanked the Minister for the way he had always been considerate and helpful to the industry during his term of office, and his tribute was warmly applauded. Mr. Ropner said that the Chamber of Shipping was non-political; they honoured those who had their great industry at heart, and though their views on other matters might differ, there was no doubt that the Minister of Transport had helped them over some very awkward fences.

Electrical Installations for Ships—XII

THE VALUE OF SIMPLICITY

By H. J. D. THOMPSON

NOTHING is easier than to define the electrical engineer's responsibility to the shipowner as the provision of the best system of generation, distribution and control of electric power, heating, cooking, lighting, signalling, indicating apparatus, communications, radio and navigational aids. It is, however, extremely difficult to secure agreement as to what constitutes the best system.

To some participants in the discussion on our subject, the overwhelming success generally of A.C. installations on land (in what are relatively the most stable of conditions, and where speed variations are not required) decides the argument. The elimination of the D.C. motor, the economy of the three-phase, 415-volts power cabling system, the substantial reduction in the cost of spare parts, supplemented by probable lower maintenance charges, provide splendid A.C. assets. But with the fullest appreciation of these A.C. virtues, the impartial mind, determined to ascertain the best electrical system for passenger liners, must carry consideration further before pronouncing opinion on a system to contend with marine instabilities which can best be described as " the citadel of variables."

The measurable considerations of capital expenditure, operational running and maintenance costs must be linked with the measurable costs of secondary effects, and in addition with the important psychological factors of simplicity, safety and reliability, as well as an assessment of the experience and capacity of the seagoing electrical personnel available to operate the plant and to diagnose troubles. Genuine disagreement on such psychological factors must occur whenever the experience of engineers is dissimilar, but their importance is such as to warrant more than a passing reference before any analysis is made of the relative economic costs of the respective electrical systems.

Simplicity

The simpler a satisfactory operational mechanism can be made, the more scientific is its design. Simplicity should be the designer's guiding principle, not only in the construction of apparatus but also in the provision of the minimum number of items to install and maintain, the facility and ease of repair of the apparatus, the easy diagnosis of defects, and (of great importance) the quick understanding of phenomena associated with the system installed. This reveals at once the difficult nature of our problem, which can be illustrated by taking the main circulating pump drives, of 63-285 b.h.p., in a *Queen Mary*.

The D.C. motor has a much more complex construction than the squirrel cage drive, and more time and knowledge would be required to determine which armature coil had broken down than which phase had earthed if single phasing had occurred. In contrast, if the trouble was due to starters, the A.C. starter would present a less simple diagnosis than D.C., as with a drive of this horsepower " direct on " starting would not commend itself to an engineer with a proper appreciation of A.C. voltage regulation problems. Again, ignoring controls at the main switchboard, the D.C. breakdown is confined to an inspection of cable, starter and motor—three items. An A.C. breakdown involves a fourth item—the slip clutch.

Phenomena associated with D.C. are confined to three considerations: (1) Change of speed due to increased temperature of the motor, requiring the simplest of corrections by shunt regulation; (2) electrolysis on the cable sheath; or (3) osmosis. If properly compounded during the armouring process, electrolysis of the sheath would not occur. Osmosis is not the frequent experience in ships' installations that it was in land traction, and possibly occurs very little more frequently than the crawling of A.C. induction motors. All these three phenomena are easily understood, and electrolysis and osmosis are eliminated by the use of H.R. cables.

With A.C. installations, less easily understood phenomena are presented.

(1) Frequency may vary, due to a rise or fall in the speed of the prime mover.

(2) Three-phase distribution may be by three-wire, four-wire unearthed, or four-wire earthed systems, while certain sections may be single-phase.

(3) The voltages for power, heating, cooking and lighting will be dissimilar, probably 415, 220 and 110 respectively, contrasted with the simpler uniform 220-volts D.C. system.

(4) The power factor problem arises, involving unnecessarily high amperages. Wattless currents often present a problem to many good mechanical engineers, as most electrical engineers engaged in power factor correction will know.

(5) The phenomena of inductance and capacity, hunting, and harmonics do not make for simplicity, and in the writer's opinion more than offset the simpler construction of the squirrel cage motor over its D.C. counterpart.

The neutral mind of Mr. Dimmock remarked that D.C. was much more easily understood than A.C. Mr. Savage rightly commented that it has become increasingly difficult to differentiate between real progress and elaboration. The more exacting demands of modern practice, such as selective load shedding, push button automatic starting and plural starting, the duplication of important auxiliaries and emergency provision for the ship's safety, economy coils on circuit breakers, running lamp indicators and some other innovations may be classified by some engineers as over-elaboration.

The writer, with a considerable background both of mercantile construction and maintenance and warship installations, is of the opinion that, considering the great expansion in the application of electricity to sea transport, D.C. installations have not really developed any substantial complexity either in operation or schematic layout. The charge of faddism can be levelled in some cases at the undue numbers of selected functional lighting controls, especially where there is subdivision into lesser and higher importance non-essentials for load shedding, but even this feature can scarcely be considered complex. The writer is also of the opinion that the relative simplicities of the respective electrical systems are better judged by marine engineers than by electrical marine specialists.

The Case for A.C.

The A.C. case for greater simplicity is mainly concentrated on the undisputed virtues of the simpler construction of single and multi-speed squirrel cage motors, high torque and slip ring motors and the alternator, compared with the construction of dynamos and motors with their lap or wave windings, commutators, and brush holder construction. This simplicity cannot be refuted, especially when it is supplemented by " direct on " starting. If, however, the only real variable-speed A.C. motor is used, the advantage of simplicity rests with D.C.

Where " direct on " starting is not feasible, D.C. starting equipment, with circuit tracing limited to two poles or just line, against three phases and possibly a neutral, is again favourable to D.C., just as calculations on voltage drop, resistance and amperage in the D.C. field are simpler than the corresponding calculations of impedance, reactance, admittance, power factor, effective (where harmonics are involved) and RMS volts.

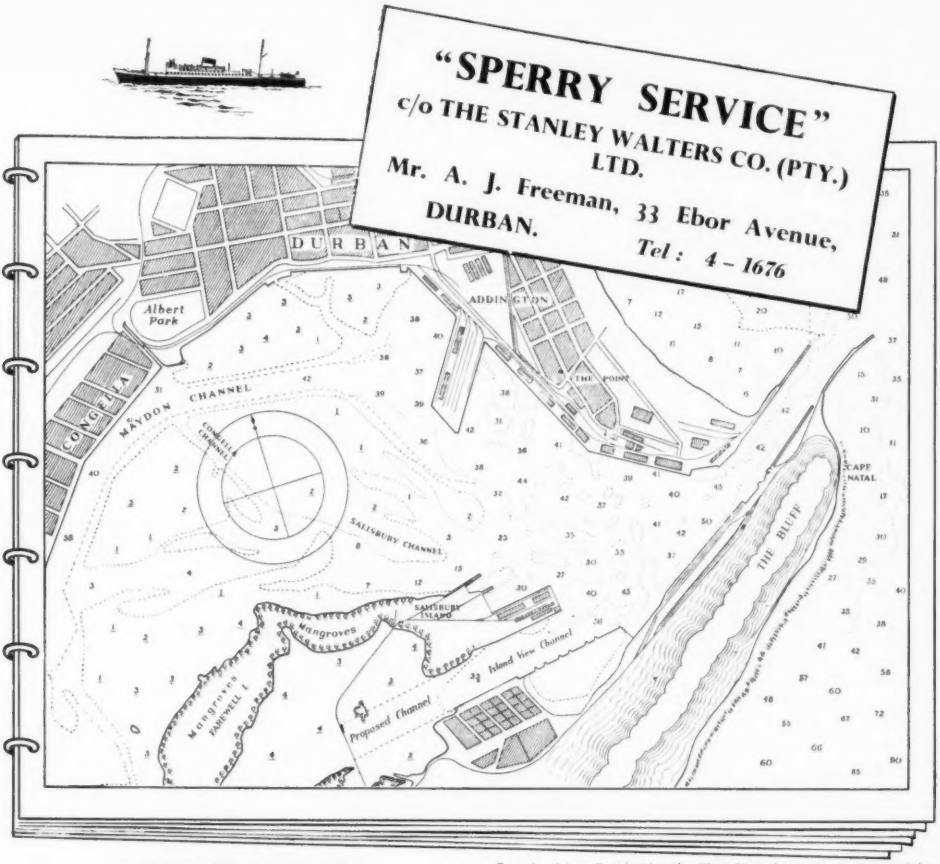
Mr. Booth's impartial analysis limited the application of the single-speed squirrel cage motor to 20 per cent of auxiliary drives. In a *Queen Mary*, no less than 246 machines (where this type of motor is applicable) are within the range of 5 h.p., where simple " direct on " starting can also be provided for D.C. machines. Moreover the simple automatic two-step contactor is suitable for starting D.C. motors of up to 40 b.h.p. which might well be considered as the upward limit for " direct on " starting of A.C. motors. However, in the effort to show to advantage A.C. economic costs, " direct on " starting has been pushed by A.C. sponsors to such extremes that voltage regulation has had very inadequate consideration. The fullest confidence is placed in the simple carbon pile regulator to fulfil satisfactorily the most onerous of duties within a 3 per cent variation limit.

If economic considerations are omitted, the success of A.C. installations in passenger liners will be determined by satisfactory voltage regulation, when extremely heavy transient loads are experienced at times of critical sea conditions, almost more than by any other factor. Magnetic leakage, armature reaction and eddy currents are fundamental features that no designer can surmount, and 18 to 25 per cent voltage dips should not be experienced in periods of crisis. This leads us to comment on the latest paper by the most enthusiastic of all A.C. sponsors.

Mr. N. V. Pestereff's Paper on A.C. Simplification

This paper, which was delivered to the Institution of Engineers & Shipbuilders in Scotland as recently as February 23, is full of brilliance, ingenuity, boldness and con-

The last instalment in this series appeared in THE SHIPPING WORLD of July 25.



Reproduced from British Admiralty Chart No. 643 with the permission of the Controller, H.M. Stationery Office, and of the Hydrographer of the Navy.

DURBAN

The excellent possibilities of Durban as a harbour cannot have escaped the eye of that prince of navigators, Vasco da Gama, when he sailed around to the east of the Cape in 1497. From Saldanha Bay to Delagoa Bay there is nothing to compare with this fine sheltered bay, with its seven square miles of safe anchorage. A harbour of such importance, handling more than half the total freight in tonnage exported and imported by South Africa and boasting a £2,000,000 Naval Base, is naturally included among the many major ports where the services of a Resident Sperry Engineer are constantly available for visiting masters.

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fidence. Its declared objective is (1) "to simplify the complexity of modern D.C. installations, which is so great that it is becoming more and more difficult for marine engineers to operate them." Other points made are (2) Messrs. Fox and Coleman's and Mr. Savage's advocation of composite A.C./D.C. installations "makes the use of A.C. on board ship as unattractive as possible, and is no answer to the pressing problem before the industry." (3) "The situation is such as to require considerable haste, and there is no time for the old-established practice of trial and error, which involves much trial and much error with its unavoidable waste." (4) Squirrel cage motors only should be installed. As a consequence, "the A.C. installation results in an overall saving in cost, weight and space." (5) "It is considered that the necessary electrical knowledge can and should be included in the training of so-called mechanical engineers as just another subject on a par with thermodynamics or mechanics, perhaps under the title of electrodynamics. There would therefore not be any necessity to carry electrical engineers as such. To meet the requirements of such staffing, however, the electrical equipment must be kept simple."

Pertinent Questions

In connection with the statements, it is pertinent to ask:

(1) What percentage of the British mercantile marine is unable to put to sea because of the difficulty of electrical operation of D.C. equipment?

(2) Why is this "pressing problem" unknown to shipyard and shipping personnel? Are the breakdowns on D.C. equipment so numerous and costly that electrical manufacturers are unable to keep pace with breakdowns, and the shipowners are running their fleets at a loss? Or are manufacturers of D.C. equipment fully engaged in executing marine orders, and electrical repair shops anxious for more work?

(3) Is the situation so desperate that the mercantile marine shows signs of collapsing due to the deficiencies of the D.C. system? Or has this criticised system made an effective contribution to the high reputation of British ships?

(4) Has any close analysis of the costs of A.C. installations as set out in Mr. Pestereff's paper been made to confirm the stated overall savings in capital costs? Or is it nearer reality to say that his proposals would probably involve the shipowner in a minimum 10 per cent increased cost of electrical construction, increase electrical running costs by $7\frac{1}{2}$ per cent while reducing the revenue earning of the ship by one-half per cent, with the only offset an inadequate maximum reduction of 75 per cent in electrical repairs?

(5) Have we mistakenly overspecialised in mercantile marine personnel and badly underestimated the capacity of the average mind to comprehend all types of engines, pumping, flooding, water servicing and drainage systems, refrigeration, air conditioning, ventilation, heating, soundproofing, cargo and docking requirements, and electrical equipment, including radio and thermionics? If so, why not require the navigational officer to supplement his duties with all the aforementioned services, and dispense with all engineers as such on board ship?

Or has trial and error proved that it is a sound economic proposition and makes for real progress and efficiency to specialise in several of the intricate services required in the modern liner, and that the future impact of scientific evolution will probably necessitate still further development in the amount of specialisation by ships' personnel?

In spite of Mr. Pestereff's injudicious statements on the above points, his paper abounds with excellent frank expositions of the problems confronting A.C., together with many futile innovations to surmount the difficulties. The reader must exercise his own judgment as to whether simplification is really achieved, or further complexity introduced. The reaction of the writer is that Mr. Pestereff has introduced the maximum amount of complexity yet suggested in order to achieve his overall simplicity, while his retention of even a limited use of D.C. makes his comments on the composite installations inconsistent.

Distinctive Proposals

The distinctive features of Mr. Pestereff's proposals, as compared with previous A.C. papers, are as follows:

(1) Squirrel cage motors should be used for all drives, except where the cost of slip couplings is not justified. In these few cases high torque and slip ring machines may be used. No tribute is made to the relative greater superiority of D.C. motors to deal with overloads in times of crisis, nor to the fact that normal operating conditions of auxiliaries approximate to only 80 per cent loading, with its reaction of bad power factor on A.C. drives.

(2) Voltage regulation is at last discussed with a measure of reality, but the conclusions reached are so contrary to the writer's opinion that further comments will be made.

(3) For frequency, the 60-cycles supply is accepted as a newly established standard, and we can endorse this frequency.

(4) Aluminium sheathed cables are advocated for main supply cables, with their economy in weight and number of supports required. If the right type of serving over the sheath is provided and the cables secured on appropriate tray plating the experiments carried out justify Mr. Pestereff's proposals, but the reduction in the costs of cabling installations would apply equally to D.C. and A.C. systems.

(5) With regard to voltage, no less than five different voltages are recommended: (a) 2,300 volts for large power—100 b.h.p. drives and over, and possibly down to 50 b.h.p.; (b) 440 volts (presumably 415 volts) for power below 50 b.h.p.; (c) 230 volts for cooking; (d) 120 volts for lighting and device circuits; (e) 208 volts for power distribution for small vessels. This multiplicity of voltages is surprising in view of other references to the value of standardisation.

(6) The earthed neutral is advanced for small ships to ensure the higher degree of safety, but Mr. Pestereff shares Mr. Savage's confidence in the unearthed neutral for large ships.

(7) Mr. Pestereff is the first A.C. enthusiast to comment "A.C. machines are not so quiet as D.C. machines," but he makes no reference to the additional expense involved in soundproofing.

(8) It is suggested that the expensive latched-in contactor "direct on" starters to withstand shock and vibration should be fitted. The author endorses this proposal, which involves increased costs compared with Mr. Savage's proposals.

(9) "Standard unit type cubicles of three sizes, preferably with anodised aluminium alloy movable portion casings enclosing vertical bars and "plug in" outgoing units, would create a new high standard and should be accepted practice." This proposal is sound. A greater degree of standardisation of marine electrical equipment is much to be desired.

(10) "Bus distribution from section boards with fused outlets as required should replace the system utilising large numbers of fuse boards." This is debatable, and provides less flexibility for changing equipments and installing additional equipment, or for conversion of liner to troopship.

(11) Protection requirements, and the inevitable discussion of fusing characteristics, are treated at greater length and more realistically than in previous papers.

(12) A most hopeful solution of the A.C. winch problem is set out in a description of the Carron Company's and Hydraulic Coupling & Engineering Company's "twin fluid coupling A.C. marine winch." This is new to the writer. The differential gear is of the epicyclic spur wheel type. Epicyclic gears have come in at times for considerable criticism, but if after extended service the winch comes up to expectations and its cost is competitive, it should be most popular. But with its two squirrel cage motors, two fluid couplings and differential gear, and the special tapered copper bar wedges for rotor construction and the cabling of D.C. supplies by three-phase full-wave metal rectifier, its cost would appear to be substantially greater than the D.C. winch, and it is regretted that no comment has been made on the relative costs of the two types.

Voltage Regulation Proposals

Mr. Pestereff comments "There is much talk about voltage regulation. All these discussions refer to steady state conditions while actually the trouble comes not from steady state effects but from transient loads, such as those caused by starting relatively large motors. A 30 b.h.p. motor thrown direct on to the line will, in many instances, throw a load corresponding to about 1.7 times the full load of a 100 kW generator at a low power factor (0.4). . . . It is clear that with machines of normal design equipped with high speed voltage regulators a voltage drop of 20 per cent is inevitable when full kVA load is thrown on to the machine.

"For small generating plant of the order of 100 kW it may be possible to use a low reactance A.C. generator with a direct coupled permanent-magnet, A.C. generator exciting the field winding of the main generator through metal rectifiers of the selenium type, and have a main field adjustable resistance to compensate for the ageing of the metal rectifiers; alternatively, a transformer with tappings could be used between the generator and rectifier. The scheme has disadvantages. As the plant is larger and therefore heavier, the efficiency is less and the fault capacity much greater, but it has the overriding quality of simplicity and robustness.

"When frequent starting and stopping is experienced, as, for example, when using winches, the lighting or other similar low powered circuits where voltage variation is objectionable would be put over to the emergency generator.

(*Continued on page 275*)

ROUND THE SHIPYARDS

Work in Progress on the North East Coast

By THE SHIPPING WORLD'S Own Correspondent

There was little launching activity during September in the area, but there will be compensation during October with five ships due to enter the Wear, and four vessels leaving the stocks at Tyne yards. Generally speaking work on new construction, despite the known difficulties, has been well maintained and shiprepairing firms have been kept busy with inquiries still arriving to ensure full employment until the end of the year.

One of the few launches during September was that of the 8,600 tons gross motor tanker *Caltex Kenya*, the first of an order for four similar vessels placed with William Doxford & Sons, Ltd., Sunderland, by Overseas Tankship (U.K.) Ltd., London. These ships are being built on prefabrication lines and work is well advanced on the second and third vessels. On the fourth tanker about 45 per cent of the work has already been fabricated, and the keel of this ship will be laid on the berth vacated by the *Caltex Kenya*. The second of the four ships will be launched within the next few weeks. Last year the Wear launching output was 37 ships of 181,544 tons gross and by the end of October the tonnage figure will be exceeded. Prospects are that the 1951 output will rate as the highest of the postwar years.

The first of the five Wear ships scheduled to be launched during October to enter the water was the 8,000 tons d.w. motor cargo ship *Tjibantjet*, building by Bartram & Sons, Ltd., for Royal Interocean Lines, Ltd., Amsterdam. This was the builder's third launch of the year, each vessel having been for export. The first of three tankers, each of 10,000 tons gross, the *London Glory* was launched by Sir James Laing & Sons, Ltd., the owners being London & Overseas Freighters, Ltd. For the same owners the Furness Shipbuilding Co., Ltd., Haverton Hill-on-Tees, which has orders to keep the staff busy until 1955, has launched the *London Victory*. One of the most interesting building jobs in the area is the construction of the 15,250 tons gross tanker *Randefjell* for Olsen & Ugelstad, of Oslo. This vessel is being built in two sections by John Crown & Sons, Ltd., and the fore section will be launched this month and later towed to the Tyne for joining to the after section, which was launched in April and is at present in the Tyne for engine installation.

October Launches

On the Tyne it is certain that the river's tonnage output this year will exceed the 1950 total of 200,253 tons gross. Of the four ships due for launching in October two have already entered the water. Vickers-Armstrongs, Ltd., Walker on Tyne, who have ten tankers under construction or yet to be started, launched the first of four tankers each of 13,000 tons gross for Stavros S. Niarchos, Athens. The new ship, named the *Saxonglade*, will be chartered by the Anglo-Saxon Petroleum Company. The Walker builders will add to the river's output by launching the Alfred Holt 8,300 tons gross cargo liner *Alcinous* on November 27. Three other ships of similar tonnage for the same owners have yet to reach the launching stage. At the Hebburn yard of R. & W. Hawthorn, Leslie & Co., Ltd., the 9,350 tons gross cargo liner *Oswestry Grange* has been launched for the Houlder Line, Ltd.

Swan, Hunter & Wigham Richardson, Ltd., will provide the remaining two October launches. From their Wallsend yard will be launched the 18,620 tons gross tanker *Velletia* for the Anglo-Saxon Petroleum Company. A ship of the same tonnage, the *Velutina*, was handed over by the same builders in July 1950 and, at that time, was the biggest tanker ever built in Britain. Another big tanker under construction by the same builders, the 18,600 tons gross *British Bulldog*, is expected to be ready for trials within the next few weeks, to bring the firm's delivery output this year up to seven vessels with a tonnage of nearly 80,000 tons gross. At the Neptune yard the 7,150 tons gross cargo liner *Chakrata* was launched on October 15, for the British India Steam Navigation Company.

The problem of electricity load spreading during the winter months will be met by Tyneside shipbuilding firms transferring part of their normal day shift work to night shift, while the operation of a 5½-day week will tend to assist in easing the problem. In response to the plans suggested by the Northern Regional Board for Industry, several engineering firms will work one late day each week, beginning work at 12 noon and finishing at 9.30 p.m.

A well known personality in shipbuilding and shiprepairing yards in the North East, Mr. William White, of Tynemouth, has retired after 23 years' service as dry dock manager with R. & W. Hawthorn, Leslie & Co., Ltd., Hebburn. Mr. White had 51 years' experience of Tyne and Tees shipbuilding and repairing yards, and during that time docked just under 700 ships. He will be succeeded at Hebburn by Mr. Norman Boyd, until recently with the Blyth Dry Docks & Shipbuilding Co., Ltd.

The Motor Show

Marine Exhibits on View

The marine side of the International Motor Exhibition has been growing in size and importance in recent years, and although it is concerned chiefly with the interests of the yachtsman, a number of the exhibits in the show, which opens at Earls Court, London, today, are of interest to the world of shipping. For the shipping man who is also a yachtsman, they may well provide an excuse to combine business with pleasure, and view the show as a whole.

Marine diesel and petrol engines form the chief link with the main part of the show, and have always been the largest group of exhibits in the marine section. Among exhibitors in this field are A.E.C., Ltd., with a handed pair of 100 b.h.p. 6-cylinder engines, suitable for a twin-screw installation. With a bore and stroke of 120 mm. and 142 mm. respectively, these engines develop their rated output at 1,500 r.p.m. They embody the A.E.C.-Ricardo Comet Mk. III fuel combustion system, and are fitted with special fuel injectors to obtain easy starting from cold without the use of heater plugs.

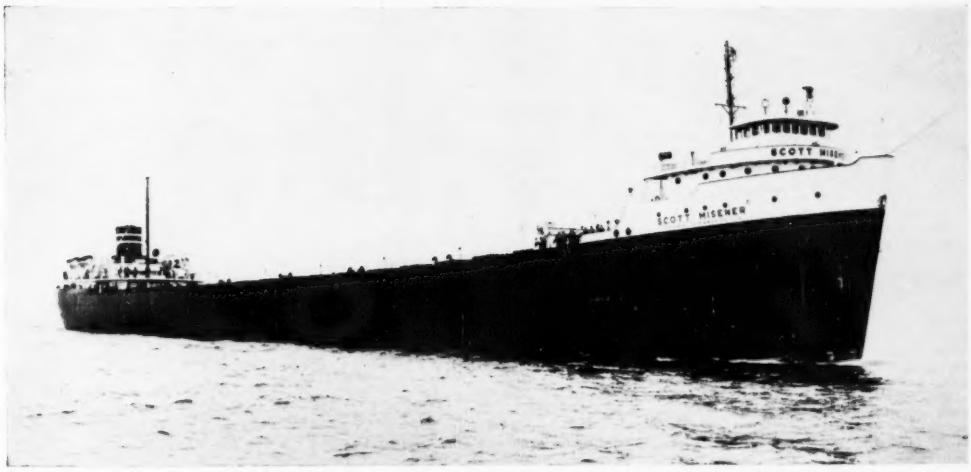
A range of engines covering both diesel and petrol models will be shown by the Coventry Victor Motor Co., Ltd., and will include a new addition to their range. This is the W.D.3 diesel engine, of 9/11 h.p. In general this engine follows the lines of the W.D.1 and W.D.2 engines, but is a little larger in overall dimensions and has a larger and heavier flywheel. Diesel and petrol engines are also to be featured by the Parsons Engineering Co., Ltd. This firm is showing a full range of engines, which again includes a new addition. In this case it is the 330M diesel marine unit, which is a marine conversion of the Meadows 330 4-cylinder high speed diesel engine. The company has taken the unusual step of reinstating, following requests, a series of engines which has been out of production for some years. The first of this series, the L2M, will be on show. It is a 2-cylinder engine.

Among other names on stands displaying engines will be such well-known ones as Austin and Morris, while five types of marine engine will be shown on the stand of R. A. Lister (Marine Sales), Ltd. These range from a 2-cylinder 21 h.p. model to one developing 63 h.p. in six cylinders.

A direct drive reversing gearbox, with an optional reduction gear, is to be featured on the stand of David Brown & Sons (Huddersfield), Ltd. It is shown coupled to one of the firm's MD4 marine diesel engines. This is a 4-cylinder unit developing 25.5 b.h.p. at 1,600 r.p.m. Universal joints are featured on the stand of Universal Power Drives, Ltd., which is devoted to a display of the RZEPPA constant velocity universal joints produced by the company.

In the accessories and components section of the show, the British Thomson-Houston Co., Ltd., is exhibiting several types of BTH magnetos (some in section), impulse starters and electric speed indicators for marine and other engines, as well as a range of other plant.

The Argentine whaling factory vessel *Juan Peron*, of 22,000 tons gross, left Belfast yesterday (October 16) on her maiden voyage. She left for the Dutch West Indies to load a cargo of oil for Argentina.



NEW GREAT LAKES BULK CARRIER

THE LARGEST MERCHANT SHIP BUILT IN CANADA

THE LATEST addition to the Great Lakes fleet of Colonial Steamships, Ltd., has entered service. Designed for the carriage of grain and ore in bulk, the *Scott Misener* is a single-screw turbine steamship of 22,000 tons d.w., with a carrying capacity of some 700,000 bushels of grain. Built by Port Weller Dry Docks, Ltd., to the design of Mr. Alex Morris, the yard's naval architect, the vessel incorporates several new features for the first time in Canadian ships on the Great Lakes. A second vessel of even greater capacity is now under construction by the same yard. The *Scott Misener* was named after Captain R. Scott Misener, the chief of Colonial Steamships, Ltd., who acted as master of the vessel on her maiden voyage, his son, Mr. John Misener, acting as mate, and his brother, Mr. Clayton Misener, as second mate. During trials on Lake Ontario the vessel made an average speed of 16.7 m.p.h. in ballast condition over a 42-mile run; and the average speed eastwards across Lake Superior on the return half of her maiden voyage was 15.7 m.p.h. The modern boiler plant enables full steam to be raised in the boilers in 20 minutes from cold.

The principal particulars of the *Scott Misener* are as follows:—

Length overall	654 ft.
Length b.p.	630 ft.
Breadth moulded	68 ft.
Depth moulded	35 ft.
Designed draught	24 ft.
Deadweight tonnage	22,000 tons
Gross tonnage	13,081 tons
Bunker oil capacity	880 tons
Shaft horsepower	6,600 s.h.p.
Designed speed	16 m.p.h. at 100 r.p.m.

The *Scott Misener* has been constructed in accordance with the requirements of the British Corporation, for service on the Great Lakes and the St. Lawrence River. Internally, she follows the general design of Upper Lake bulk carriers, but externally the application of a raked soft-nosed stem, short streamlined funnel and semi-cruiser stem, gives her an especially pleasing appearance and is in accordance with modern practice. The *Scott Misener* is arranged with machinery aft. The pilot house and accommodation for the deck crew and guests are at the forward end, and the engine-room crew, catering staff, galley and dining rooms aft.

The main hull is divided by 11 transverse bulkheads forming 12 main compartments. The inner bottom extends throughout the length of the vessel. In the machinery space it is 4 ft. above the keel to 5 ft. elsewhere. The spaces forward and aft of the cargo holds are further divided by two decks below the upper deck. Wing spaces formed by two longitudinal bulkheads running throughout the cargo holds are used for water ballast. Starting from forward, the subdivisions are as follows: Fore peak, void space, holds Nos. 1 to 6, cofferdam, O. F. bunkers, machinery space and aft peak.

Structural Design

The vessel is designed for a combination of riveting and welding. In general, shell seams and frame flanges are riveted, as are the connections of the deck stringer to the shell plating. Riveted connections were used for the attachment of the welded subsections of the deckhouse to avoid distortion and to attain fairness. Welding was used for all internal structure, including framing, inner bottom floors to shell and tank top, tank side bulkheads and tank top plating. Where possible, automatic welding was used to best advantage. Sub-assemblies were used in the construction of the tank top, longitudinal bulkheads and transverse bulkheads. The complete stern section was assembled and lifted into position. All the transverse arches with deck sections were assembled complete with deck panels.

The inner bottom is longitudinally framed with inverted angles spaced 18 in. apart in conjunction with intercostal girders. In the double bottom, the only riveting used was in the attachment of the longitudinal frames to the shell. The entire bottom shell plating has welded seams and butts, the side shell plating has riveted seams with welded butts. Side tank fore-and-aft bulkheads extend to the upper deck. The spaces above the lower deck stringers port and starboard form access tunnels for crew and for service piping and wiring. The upper deck stringer plating, $1\frac{3}{8}$ in. thick, has welded butts and seams.

Size of Hatches

The size and spacing of the cargo hatches are arranged to suit conditions at loading and unloading docks. The *Scott Misener* has 19 hatches, spaced at 24-ft. centres. Hatch coamings are 24 in. high, 6 in. in excess of freeboard rules. Each hatch is fitted with a one-piece steel cover made watertight with wax gaskets. Covers are secured by special quick-acting clamps. There are 70 clamps per hatch. Clamps are self-locking and quickly fastened or released by a special lever. The covers are lifted from position by means of a travelling deck crane. The crane runs on longitudinal tracks and lands the covers between hatches, when preparing to load ship.

The lower part of the stem consists of a steel casting attached to the shell plating by welding, and above the load waterline the stem is formed with plates rolled to form a soft-nose stem. The ship has a contraguide sternframe and rudder, and this has proved to be very effective on a ship of full form aft, giving excellent results when manœuvring

at slow speeds. This stem casting weighed some 35 tons and was cast in three sections with joints above and below the boss. Thermit welding was used to join the sections together, thus eliminating extensive machining and drilling of scarphed joints.

Accommodation

All officers, except the 4th engineer and electricians, who share a room, have single cabins with attached bathroom. There are two guest cabins and an observation saloon in the forecastle deckhouse, as well as the master's office and bedroom. A small pantry, equipped with electric refrigerator and hot plate, is located between the master's and guests' accommodation.

All living accommodation is insulated with sprayed asbestos, having a hard finish in all rooms used by crew, etc. Throughout the vessel, "Holoplast" panels have been used for bulkheading and linings. This fire-resistant air cell plastic panelling with veneer finish gives a tasteful and hygienic finish. All quarters are heated with steam convector-type radiators. The convectors are individually controlled and supplied with steam at 10 lb. per sq. in.

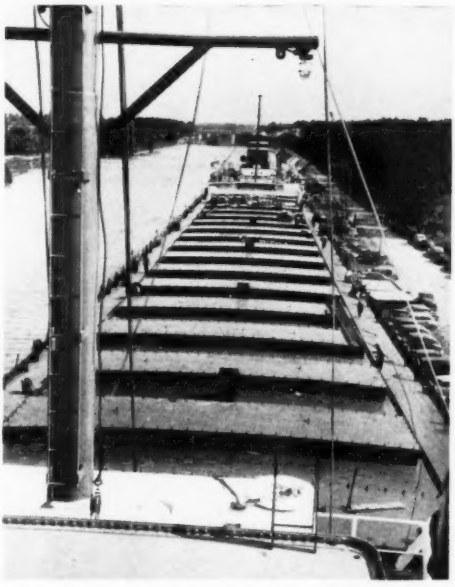
The large wheelhouse is equipped with all modern aids to navigation, such as radar, echo sounders, direction finders, gyro compasses, radio telephone and electric logs. The vessel may be steered either by hydraulic telemotor or electric control, the electric control being operated by hand or by an automatic pilot. The two electric telegraphs, one for the engine room, and one for docking, are both of Chadburn's synchrostep type.

The *Scott Misener* is equipped with six Johnston automatic tension mooring winches, one located in the windlass room, forward, four in the waist and one aft. All winches have remote controllers placed at convenient positions at the ship's side, port and starboard, so that the operator has an unobstructed view of the dockside when warping ship. Forward, an electric windlass in the forecastle tweendecks handles the two 10,000-lb. anchors. Aft, an electric windlass located on the boat deck handles the 7,000-lb. stern anchor. The steering gear is electric hydraulic, having dual pumps and motors and rams.

Gravity davits handle the four steel lifeboats. Recovery of the boats is by means of electric winches. A public address system is installed to give communication to all vital points on board. All speakers are of the "talk-back" type. Telephones also connect the wheelhouse to eight stations throughout the vessel.

Propelling Machinery

The main propelling machinery consists of one set of Westinghouse steam turbines with double-reduction gearing to a single screw. They comprise one high-pressure and one low-pressure turbine, exhausting to a condenser slung under the L.P. turbine. The normal output of the turbines is 6,000 s.h.p. at 100 r.p.m., and the maximum output is 6,600 s.h.p. at 103 r.p.m. Steam pressure to the H.P. unit is 465 lb. per sq. in. at 750 deg. F. For astern working, an H.P. astern unit



The "Scott Misener" has 19 hatches

is arranged on the L.P. turbine unit, 60 per cent of ahead power being developed for astern working. The condenser is circulated by a 75 h.p. vertical electrical centrifugal pump, having a capacity of 10,600 gallons per minute. This is cross-connected with the 25 h.p. auxiliary circulating pump, also of the vertical centrifugal type. Both pumps can serve to circulate the main and auxiliary condensers.

The two main boilers are of Foster Wheeler cross-drum type, the normal output of each boiler being 27,500 lb. per hour. Feed-water temperature into the economiser is 240 deg. F. Each boiler has three furnaces. Oil fuel is supplied to boilers by a duplex fuel-oil heating and pumping unit. The boilers are equipped for fully automatic operation by means of Bailey regulators for feed water, combustion control, etc. Two automatically controlled turbine-driven fans supply forced draught to the furnaces.

The observation lounge in the forecastle deckhouse, with "Holoplast" bulkheadings and linings

Electric power is supplied by two 300-kW turbo-generators, with power taken off at 220 or 120 volts D.C. Each generator has its own condenser slung underneath and is served with its own circulating pump and condensate pump. The main condensate is handled by means of an electric centrifugal pump with a steam-turbine-driven standby condensate pump.

The close-feed system has four stages of heating. Condensate pumps discharge through main air ejector and gland seal condenser to a direct contact heater placed in the base of the funnel. Main and standby feed pumps, both steam-turbine-driven centrifugal pumps, take feed water from the heater and discharge to boilers through economisers to the boiler drums. A steam-driven Weir's vertical feed pump supplies feed water when the vessel is in harbour. An evaporator, having a capacity of 25 tons per day, operates on exhaust steam or low-pressure steam and discharges to feed tanks placed in the double bottom under the engine room.

A 100-kW General Motors diesel generator, placed on the boat deck, supplies power to all units required to navigate the ship through an emergency switchboard in the event of a failure of the main generators.

Two 75 h.p. 220-volt vertical centrifugal pumps are located in the engine room, adjacent to the ballast manifolds. These pumps are capable of handling ballast water from all ballast tanks through 10-in. suction pumps to the manifolds. Ballast pumps have 18-in. suction and 20-in. discharge. In addition, two steam-driven horizontal duplex and auxiliary ballast pumps handle the ballast water through the same manifolds for tank stripping.

Other engineroom auxiliary machinery consists of lubricating oil pumps; air compressors; oil fuel transfer pumps; fire pump; general service pump; and bilge pumps. Two automatically controlled electric pumps handle the sanitary water system. An electrically driven centrifugal pump serves to supply water to the fresh-water tanks. The engine-room workshop is equipped with lathe, drill press and grinder, all electrically driven. The manœuvring position is placed on the starboard side of the engine room on the second deck adjacent to the engineroom office. A four-bladed "Heliston" bronze propeller, 18 ft. 3 in. diameter, of scantlings for service in ice, is fitted.

ELECTRICAL INSTALLATIONS FOR SHIPS

(*Continued from page* 271)

"For large plants up to 750 kVA, transformers will be used. The regulation of the transformers at unity power factor will be 3 or 4 per cent. On lighting a voltage range of ±5 per cent is quite satisfactory, so that the automatic voltage need only maintain the voltage within $\pm 2\frac{1}{2}$ per cent to achieve satisfactory operation. Here again transient conditions must be considered. The machines under consideration are high-impedance machines, so provision must be made for a transient voltage drop of 20 per cent. The regulating equipment which seems most appropriate is a simple circuit-type voltage regulator using a rotary amplifier type of exciter. The big advantage here is that no relatively delicate equipment is necessary. Using the rotary amplifier exciter makes the voltage regulating unit small, and the exciter field would be fed through an auxiliary tachometer-type generator, the output of which would be controlled by a magnetic amplifier. It is true that a commutator-type machine is introduced, but pending the development of anything more satisfactory this seems the best proposition for this size of plant. It will be realised that a normal exciter is a power amplifier, that is, a relatively small field controls the larger output, so that the modern development of rotary power amplifiers is a matter of type rather than kind. In all probability the single-stage type of rotary amplifier will meet the requirements.

"For very large ships the size of the generating plant is quite considerable, but here again much of the power and all the lighting is fed through transformers, so that the regulation of the generating set has to be low. The machines are again high-impedance units, so that a transient voltage drop of 20 per cent must be allowed for. In view of the size of generating plant the dimensions of the pilot exciter are not so important, and the scheme can be developed further by making the small permanent magnet A.C. generator feed the main excited field through a magnetic amplifier. This in turn would generate A.C. and feed the main generator field through a rectifier, preferably of the metallic type.

"Provided the control equipment is suitably designed and the motor characteristics generally are considered carefully, there seems to be no reason why the 20 per cent transient voltage dip should not be accepted, and motors whose starting kVA equals the generator kVA can then be switched on to the supply.

"On the starters the low-voltage dips can be accommodated either by special design of the transformers feeding the control circuits or, preferably, by using latching-in contactors, the latter corresponding to short power station practice.

"The transformers for stepping-down the supply to motors below 50 b.h.p. capacity need careful consideration, particularly those feeding the deck machinery. The usual diversity factor of 33 per cent of the installed load may or may not be sufficient, depending on the number of winches fed from the one transformer. Limiting the size to 100 kVA, it should be possible to use eight winches on one transformer. The connections need watching, as winches are often used in pairs, only one of the pair carrying appreciable load at a time. This gives an immediate differentiation of 50 per cent. Further, the actual motor power requires watching as on an A.C. installation it is quite probable that a winch may carry an auxiliary motor for control purposes. The power taken need only be that of the equivalent constant power curve. If it were possible to associate with the transformer feeding the winches a static condenser of appreciable capacity it would be possible to help considerably in reducing the peak load imposed by starting the winch motors direct on the line. However, since all available power condensers are oil immersed this need not be considered.

"The regulation of the transformer can be obtained by the usual method. The starting kVA of a 30 h.p. motor would be 170 kVA, the transformer reactance 4 per cent, and resistance 2 per cent, which gives a regulation of 5 per cent. No trouble need be expected on this account. If very close voltage control is required at any point this can be provided by special regulating equipment, which is available in units of up to about 20 kVA.

"To summarise, by making slightly unorthodox arrangements on small ships the necessary generating plant is available in port which will allow the frequent "direct on" starting of relatively large motors. For larger installations, load corresponding to full kVA of a generator can be switched on provided that the voltage drop of 20 per cent for a few cycles can be tolerated. The starting of the larger motors on such an installation, however, is so rare that a voltage dip of the above order can well be tolerated. Further, since the time of starting the larger motor is known, more than one generator can be put on at that time, thus reducing the voltage dip to be expected. In very special cases a motor can be brought up to speed with the generator. Then a motor equal in capacity to the generator could be started."

In the next article comments will be made on these elaborate proposals, which are obviously empirical, and even so advance a highly controversial proposition—that a 20 per cent voltage drop for a few cycles can be tolerated.

Greenock Industries Exhibition

Marine engineering firms in Greenock staged an outstanding show at the Greenock Festival Industries Exhibition. John G. Kincaid & Co., Ltd., used a magnificent model to spotlight their work and made particular reference to the Kincaid-Polar engine, in addition to their work on B. & W.-H. & W. diesel engines. The construction of a new smithy and fabricating shop, now in progress, will still further enhance the scope and vitality of this 83-years-old marine engineering concern. Rankin & Blackmore, Ltd., showed bedplates for British Polar diesel engines, furnace bridges and a variety of other special marine components. The Cowal Engineering Co., Ltd., featured the Clyde petrol marine engine, as well as a range of components and fabricated units. John Hastie & Co., Ltd., had a transmitter steering telemotor operating a receiver telemotor, as part of their show, and used, as a background, composite pictures of famous ships with, below, the Hastie steering equipment supplied. This company reports a major volume of business on hand for builders in every part of the country. Scotts' Shipbuilding & Engineering Co., Ltd., one of the most famous Clyde yards, showed models of the *Taiyuan*, built in 1949, and the destroyer *Lookout*, as well as a working model of the Scott-Doxford airless injection piston marine oil engine.

The current issue of *The Ship's Bulletin*, published by the Esso Shipping Company, tells the story of the *Invercaibo*, a tanker built by Harland & Wolff, Ltd., in 1925, and converted in 1938 into a dredger for use on Lake Maracaibo.

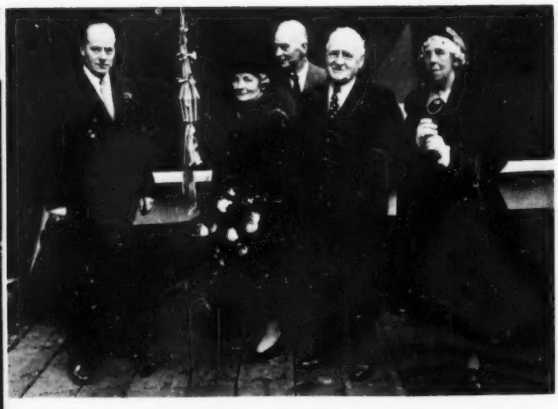
The October issue of *The P.L.A. Monthly* contains the second part of Eric Rosenthal's article on "London's Shipping and South Africa," an article by Margaret S. Ritchie on "Fine Feathers" and the usual monthly features. The frontispiece is a photographic study on the new P.L.A. Grain Elevator *John Anderson*.

German Fruit Carrier " Perseus "

A fruit carrier with a service speed of 16½ knots has been completed by Deutsche Werft A. G., Hamburg, for the Afrikanische Fruchtcompagnie. She is the motorship *Perseus*, a vessel of about 3,000 tons gross with a deadweight of 3,500 tons on a draught of 20 ft. 2¼ in. Her principal dimensions are 373 ft. 4½ in. length b.p., 49 ft. 8½ in. breadth moulded and 21 ft. 3½ in. depth to second deck. There is space for bananas of about 220,000 cu. ft. The propelling machinery consists of a 6-cylinder two-stroke double-acting M.A.N. diesel engine developing 4,100 b.h.p.

The Cargo Ship " Henriette Schulte "

Of about 6,200 tons gross, the single-screw cargo motorship *Henriette Schulte* has been delivered to the Atlas Reederei A. G., of Emden, by Nordseewerke Emden G.m.b.H. With a deadweight of 9,600 tons, she has dimensions of 472 ft. 6 in. length o.a., 439 ft. 9 in. b.p., 57 ft. 9 in. breadth and 24 ft. 10¾ in. draught. A service speed of 12 knots is maintained by a M.A.N. diesel engine developing 3,550 h.p.



Launch of the " Oswestry Grange "

The launch took place on October 3 of the single-screw cargo motorship *Oswestry Grange*, building by R. & W. Hawthorn, Leslie & Co., Ltd., for the Houlder Line, Ltd. The naming ceremony was performed by Mrs. W. C. Warwick, who is shown in the picture next to Mr. H. B. Robin Rowell, chairman of the shipbuilders (*extreme left*), the others in the picture being, from left to right, Sir Philip Johnson, managing director of the St. Peter's Engine Works of R. & W. Hawthorn, Leslie & Co., Mr. W. C. Warwick, chairman of Houlder Line, Ltd., and Miss A. A. Kirtley

NEW CONTRACTS

Yards in Great Britain and Northern Ireland

Shipowners	No. of Ships	Type	Approximate Tonnages: Gross	Approximate Tonnages: Deadweight	Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
Anglo-Saxon	2	Bunkering tanker	—	725 (each)	174 o.a. × 29.5 × 12.75	—	Steam	—	Plenty & Son	Clelands (Successors)
Ben Line	1	Cargo	—	12,000	—	16	Dble-red. geared turbine	—	D. Rowan & Co.	Chas. Connell
Dalhousie Steam & Motorship Co.	1	Cargo	—	10,500	—	—	Tr.-exp. steam	—	N.E. Marine	Blyth D.D.
Alfred Holt & Co.	2	Cargo liners	7,600 (each)	—	452.75 b.p. × 62 × 35.25	16	B. & W. diesel	—	Harland & Wolff	Vickers-Armstrongs, Walker ; and Harland & Wolff, Belfast (1 each)
Alfred Holt & Co.	1	Cargo liner	8,300	—	452.75 b.p. × 62 × 35.25	16	B. & W. diesel	—	John G. Kincaid	Caledon S.B.
Gorrissen & Klaveness A/S, Oslo	2	Cargo*	—	12,500 (each)	—	16	Diesel	—	—	Fairfield S.B.
Queen Line	1	Cargo	—	9,850	—	13.5	4-cyl. Doxford diesel	4,400	Shipbuilders	Swan, Hunter & Wigham Richardson, Walker
Lamport & Holt Line	1	Cargo	—	7,000	—	15	5-cyl. Doxford diesel	—	N.E. Marine	Wm. Pickersgill

Commonwealth and Foreign Yards

Lorentzen's Rederi Co., Oslo	1	Cargo	—	7,000	—	—	Steam	—	—	Fredriksstad M.V.
Moltzau & Christensen, Oslo ; Lorentzen's Rederi Co., Oslo ; Olav Ringdal, Oslo ; Wallem & Co., Bergen ; and Olsen & Ugelstad, Oslo (1 each)	5	Tankers	—	13,500 (each)	—	—	Diesel	—	—	Fredriksstad M.V.
J. T. Farsjo & Co., Oslo	1	Cargo	—	7,000	—	—	Steam	—	—	Fredriksstad M.V.
Jacob Kjorde A/S, Bergen	1	Tanker	—	20,000	—	—	Diesel	—	—	Fredriksstad M.V.
A/S J. Ludwig Mowinckels Rederi, Bergen	1	Cargo liner	—	—	—	—	—	—	—	Akers M.V., Oslo
Fred Olsen & Co., Oslo	1	Cargo	—	1,400	—	—	Diesel	—	—	Moss Vaerft & Dokk
Arne Blystad, Oslo	1	Tanker	—	1,250	—	—	Diesel	—	—	Glommens M.V., Fredrikstad
A/S Thor Dahl, Sandefjord	1	Cargo liner	—	7,750	—	—	—	—	—	Bergens, M.V.
A/S Havtor, Oslo	1	Cargo liner	—	8,250	—	—	—	—	—	Eriksbergs M.V., Gothenburg
A/S Hakedal, Oslo	1	Tanker	—	18,300	—	—	Diesel	—	—	Eriksbergs M.V.
Skibs A/S Snefonn, Oslo	1	Tanker	—	18,300	—	—	Diesel	—	—	Eriksbergs M.V.
Leif Hoegh & Co. A/S, Oslo	1	Cargo	—	8,300	—	—	Diesel	—	—	Eriksbergs M.V.
Sigurd Herlofson & Co., Oslo	1	Tanker	—	24,000	—	—	Diesel	—	—	Kockums M.V., Malmo
Leif Hoegh & Co., Oslo	1	Cargo	—	8,850	—	—	Diesel	—	—	Howaldtswerke, Kiel

* The contracts for these two cargo vessels have been taken over by Gorrissen & Klaveness from other shipowners.

LAUNCHES

Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No.	Type	Approximate Tonnages: Gross	Approximate Tonnages: Deadweight	Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
Sept. 26	Aberdeen Harbour Commissioners	*Sir John H. Irvin*	Harbour tug	—	—	56 × 13 × 7	—	Tw.-scr. diesel	96	Russell, Newbery	Richard Dunston, Thorne
Oct. 4	London & Overseas Freighters	*London Glory* (793)	Tanker	10,000	15,300	506 o.a. and 475 b.p. × 67.375 × 37.33	12.5	4-cyl. diesel	—	Wm. Doxford	Sir James Laing
Oct. 4	F. T. Everard & Sons	*Seriality*	Cargo	1,500	1,830	225 × 37.83 × 16	—	Newbury "Sirron" diesel	800	—	Grange-mouth Dockyard
Oct. 11	Soc. Navale Delmas Vieljeux and Soc. Courtage & Transport	*Iliade*	Tanker	12,700	18,700	540 b.p. × 73 × 39.25	—	Harland-B. & W. 5 scr., 6-cyl., 2-str., diesel	—	Shipbuilders	Harland & Wolff, Govan

Commonwealth and Foreign Yards

Sept. 20	Angb. A.B Ferm, Kristinehamn	*Fermland**	Tanker	10,100	15,800	515.16 o.a. × 64 × 38.16	14.5	B-cyl., 2-str. diesel	7,350	Shipbuilders	Gotaverken, Gothenburg

* Corrected details of a launch reported in THE SHIPPING WORLD, October 3, 1951

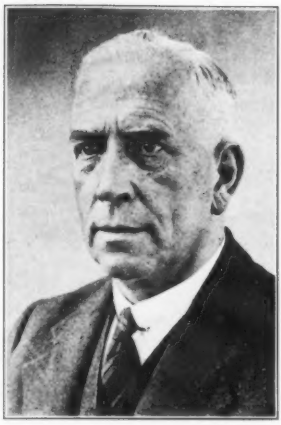
TRIAL TRIPS

Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No	Type	Approximate Tonnages: Gross	Approximate Tonnages: Deadweight	Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
Oct. —	Clyde Shipping Co.	*Flying Merlin*	Tug	260	—	105 × 27 × 12.8	—	Tr.-exp. steam	—	—	Ferguson Bros. (Port Glasgow)

Commonwealth and Foreign Yards

Sept. —	French Govt.	*Ampere*	Cable ship	2,100	1,611	289.92 o.a. and 272.33 b.p. × 41.16 × 25.33	14	Tw.-scr. geared turbine	2,500	Ch. et Atel. de St. Nazaire (Penhoet)	Ch. de Normandie, Grand Quevilly
Sept. 27	D.D.G. Hansa, Bremen	*Barenfels*	Cargo	7,200	10,000	—	—	M.A.N. diesels	3,600	—	A. G. Weser, Bremer-haven
Oct. —	Italia Line, Genoa	*Giulio Cesare*	Pass. liner	25,000	—	682.16 o.a. × 87.25 × 49.25	21	Tw.-scr., 12-cyl., 2-str. Fiat diesel	26,000	—	Cant. Riuniti dell' Adriatico, Monfalcone



Director of Hartlepool Engine Works

ON the retirement of Mr. W. E. Loveridge (*left*) from the position of resident director at the Hartlepool Works of Richardsons, Westgarth & Co., Ltd., after 40 years' service with the company, Mr. T. P. Everett (*right*) has been appointed as his successor. Mr. Loveridge, who retains his seat on the board of the company, served an apprenticeship at the Central Marine Engine Works of William Gray & Co., Ltd. After some experience with the Societe des Ateliers et Chantiers de France, he joined Richardsons, Westgarth in 1911. He subsequently became a local director of the company and then full director, joining the parent board on the amalgamation of Richardsons, Westgarth & Co., the North-Eastern Marine Engineering Co., and George Clark & Co. He has been director-in-charge of the Hartlepool Works of the group since 1947. Mr. Everett joined Richardsons, Westgarth & Co. in 1932, after having served with Brown, Boveri & Co., Baden, in the turbine testing and design departments. He has been a director of the company since 1948

MARITIME NEWS IN BRIEF

From Correspondents at Home and Overseas

THE RANK of Commodore has been instituted in the Royal Fleet Auxiliary Service. This service, which is manned by Merchant Navy personnel, comprises more than 80 vessels, including a hospital ship, over 30 large tankers and some fleet supply ships. The Commodore will fly a broad pendant. The design of this, which was approved by H.M. the King just prior to his illness, takes the form of an anchor surrounded by a gold rope circle on a navy blue field. The pendant was first hoisted in the Royal Fleet Auxiliary *Fort Dunvegan*, commanded by Captain S. G. Kent, who has commanded Royal Fleet Auxiliaries for more than 27 years.

MR. W. B. ROBSON has relinquished his position as head of publicity and order departments with Brookhirst Switchgear, Ltd., Chester, on his appointment as general manager of Cantie Switches, Ltd., Bromborough, Cheshire. Mr. Robson joined Brookhirst Switchgear, Ltd., in 1938. Between 1939 and 1946 he was personal assistant to the managing directors, manager of branch works, and subsequently assistant works manager.

A DURBAN shipping official has estimated that shipping delays in Durban cost shipowners £100,000 in September, the total cost to South Africa being £450,000. He said that shipowners are becoming increasingly concerned at the cost of operating vessels in South African waters, with the average delay of three to six days in port costing as much at £500 a day.

THE total effective strength of the personnel of the British Merchant Navy (excluding Asiatic seamen signed on in Asia) at September 30 was 145,810, a net gain of 631 on the month, according to a monthly return issued by the Registrar-General of Shipping and Seamen.

THE DEATH has occurred suddenly of Mr. R. W. Knox, local secretary at the South Bank yard of Smith's Dock Co., Ltd. He had served with the company for 35 years.

* * * *

NEWS has been received of the arrival at their destination at Iquitos, on the upper Amazon, of the two very shallow draught river gunboats *Ucayali* and *Maranon*, built for the Peruvian Navy at the Southampton yard of John I. Thornycroft & Co., Ltd., and fitted with British Polar diesel engines. The voyage of some 4,000 miles from Southampton to Para and the further 2,000 miles up the difficult River Amazon to Iquitos was completed in the creditable period of 44 days. The 600-tons floating dock, also built by Thornycrofts for the Peruvian Navy, has arrived at Para on its way to Iquitos.

A DIRECT passenger liner service between New York and Spain is to be offered by American Export Lines, following the introduction into the schedule of their "Four Aces" liners of a call at Barcelona on the outward run as well as the existing homeward run call. Other changes in the schedule include the substitution of Iskenderun for Istanbul as a port of call.

HAVING secured several more orders, Clelands (Successors) Ltd., Willington Quay-on-Tyne, have now enough work to last until 1954. The latest orders include two 725-tons bunkering tankers for the Anglo-Saxon Petroleum Co., Ltd., to be engined by Plenty & Son, Newbury. Berths have also been reserved at the yard for a 700-tons coaster and a 700-tons tanker, for different London owners.

THE Norwegian steamer *Christen Smith* has loaded seven oil barges built by Clelands (Successors) Ltd., Willington Quay, for service abroad. Six of the barges are for the Anglo-Saxon Petroleum Co., Ltd., and the other is for an American firm. They are being shipped to Porto Novo, West Africa.

MR. F. S. BATEY has been appointed chairman of Lawson-Batey Tugs, Ltd., Newcastle and South Shields, in succession to Mr. J. T. Batey, who died in July. Mr. G. H. R. Towers, managing director of John Readhead & Sons, Ltd., South Shields shipbuilders, has been elected a director of the firm.

CAPT. R. M. RICHARDSON has been appointed to the vacant secretaryship of the Merchant Navy Training Board. For the last 19 years Capt. Richardson has been on the staff of H.M.S. *Worcester*.

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THE ITALIAN liner *Europa*, which for the past year has been operated by the Arnold Bernstein Line in the trans-Atlantic service, is to be modernised and put into a new cruise service from New York to the Bahamas, starting just before Christmas. She will be renamed *Nassau*, and will be operated by Home Lines. The work of modernisation will be carried out in Genoa. The vessel, which is now 28 years old, was originally the P. & O. liner *Rimutaka*.

A CONTRACT from the French Government has been received by Soc. Francaise Radio-Electrique, French licensees of the Decca Navigator Co., Ltd., to erect a chain of Decca transmitting stations in France. The chain will be primarily an aid to aerial navigation, and will link up with the German and Danish chains as well as the two southern British chains.

MR. IVOR W. SHELLY has recently joined the staff of J. Stone & Co. (Charlton) Ltd. He is in their marine sales department at Oceanic House, 1a Cockspur Street, London, S.W.1.

CDR. F. W. HORNSBY, R.N., a past president of the Institution of Engineering Draughtsmen & Designers, has been appointed Director of Standardisation (Defence) by the Minister of Supply.

THE Admiralty has announced that the medium-sized Naval hospital ship which is to be built will be used by H.M. the King in time of peace as a Royal Yacht. It will replace the *Victoria and Albert*, which is no longer seaworthy.

A BRITISH company, the Cleveland Bridge & Engineering Co., Ltd., is to build a new bridge over the Middle Harbour, Sydney. It will be 745 ft. long, and will have a span in the centre that can be opened or closed in 45 seconds.

CIVIL SERVICE COMMISSION

THERE are vacancies for appointments as Engineer and Ship Surveyors and Nautical Surveyors (Male) in the Marine Survey Service of the Ministry of Transport.

Candidates must be at least 28 years of age on 1st January, 1951.

Candidates for posts of Engineer and Ship Surveyor must : (a) possess either (i) an Extra First Class Certificate of Competency as Engineer in the Mercantile Marine, or (ii) a First Class Certificate together with a University Degree in Engineering ; or (b) be retired Naval Engineer Officers who have served on a regular engagement and who are in possession of a First Class Certificate of Competency or of Service.

Candidates for posts of Nautical Surveyor must possess an Extra Master's Certificate of Competency and must have been in command as Master of a foreign going merchant ship.

London salary scale, £600 (at age 30, with small adjustments for new entrants above or below that age) by £25 to £900. Provincial rates are somewhat lower. There are higher posts on the salary scale of £900-£1,350.

Further particulars and forms of application may be obtained by post from the Principal Establishment and Organisation Officer, Ministry of Transport, Room 6029, Berkeley Square House, W.1, or on personal application to any Survey Office of the Ministry of Transport.

The last date on which completed application forms can be received will be the 31st December, 1951, but applicants who apply before this date who appear qualified will be summoned as soon as possible to an interview in London to test both technical ability and personal qualities. No written examination. Successful candidates will be offered appointment shortly after the interview. 11260/b 150 JW

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